

COURSE FILE

B.COM MODEL III (TAXATION)
2018-2021

CO5CRT15-ENVIRONMENT MANAGEMENT AND HUMAN
RIGHTS


Dr. K. K. John
Principal
Saintgits College of Applied Sciences
Kottukulam Hills, Pathamuttom P. O.
Kottayam 686 532, Kerala



DEPARTMENT OF COMMERCE
SAINTGITS COLLEGE OF APPLIED SCIENCES

SAINTGITS COLLEGE OF APPLIED SCIENCES

DEPARTMENT OF COMMERCE

COURSE FILE- CO5CRT15 Environment Management and Human Rights

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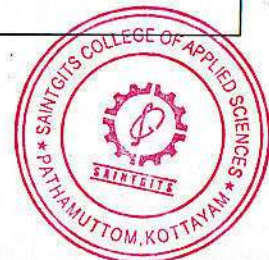


B COM TAXATION (2018-21)

Name List

1	AARATHI BALAKRISHNAN
2	AAVANI V R
3	ABHIRAM S
4	ABHIRAMI VIJAYAN
5	ADARSH T SABU
6	AHNA RACHEL VARGHESE
7	AJO ALEX
8	AKASH DEEPU
9	AKHIL V JACOB
10	AKSHAYMON SAMUEL
11	ALBIN ABRAHAM
12	ANAN GEORGE KOSHY
13	ANEETA SUSAN GEORGE
14	ANIL GAYATHRI
15	ANU M
16	ANURAG A K
17	ARAVIND RAJAGOPAL
18	AROMAL RAVEENDRAN
19	ASHLY SARA KOSHY
20	ASWIN P KUMAR
21	ATHIRA MOHAN
22	BALAKRISHNAN J
23	CHRISTEENA M GEORGE
24	EBIN JOY
25	EMIL GEORGE EAPEN
26	JACOB KEVIN MATHEW
27	JAKE RONY
28	JELITA E MATHEW
29	JOHAN GEORGE SEN

30	JYOTHI KRISHNA
31	K AMAL AJI
32	K.PHILIP THOMAS
33	LIBIN VARKEY KURIKOSE
34	MARION OOMMEN
35	MEENU E.M
36	MIDHUN V THOMAS
37	MILIE HASEEB
38	NEHA ANN JOSEPH
39	NEVIL V ABRAHAM
40	NIDHIN RAJ
41	PAVITHRA N
42	PRIYANKA ANNA LESLIE
43	REN P THOMAS
44	RIYA ELSA PHILIP
45	SAIN K PRADEEP
46	SANDRA ACHU THOMAS
47	SANDRA NINAN
48	SANDRA SUSAN JOHN
49	SHAROOK F SHAJI
50	SNEHA SARA MATHEW
51	SNEHA THOMAS
52	SREYA RAJESH
53	STACY ELSA JOHN
54	STENNIMOL E ABRAHAM
55	TIBIN THOMAS
56	VAISHAKH BABU
57	VISHNURAJ B





DEPARTMENT OF COMMERCE

TIME TABLE FOR ONLINE CLASSES

B COM TAXATION (2018-21)

Semester V

Class	Days	1(9.10-10.10am)		2(10.10-11.10am)		3(11.25-12.25pm)		4(12.30-1.30pm)		5(2.00 -2.30pm)	
		SUB	FAC	SUB	FAC	SUB	FAC	SUB	FAC	SUB	FAC
T5	Monday	Open Course		<u>EVM</u>	<u>PT</u>	IT	CAC	ECOM	VPG	MENTORING/ CLUB HOUR	
	Tuesday	Open Course		COST	AMJ	IT	CAC	<u>EVM</u>	<u>PT</u>		
	Wednesday	Open Course		IT	CAC	COST	AMJ	ECOM	VPG		
	Thursday	Open Course		<u>EVM</u>	<u>PT</u>	COST	AMJ	ECOM	VPG		
	Friday	COST	AMJ	ADD ON		ADD ON		IT	CAC		

Core Course : ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS

Instructional Hours: 90

Credit: 4

Module I (18 Hours)

Unit 1 : Multidisciplinary nature of environmental studies (2 hrs).

Definition, scope and importance -need for public awareness

Unit 2 : Natural Resources :

Renewable and non-renewable resources : Natural resources and associated problems.

Forest resources : Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people. **-Water resources** : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. **Mineral resources** : Use and exploitation, environmental effects of extracting and using mineral resources, case studies. **Food resources** : World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. **Energy resources**: Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources, Case studies. **Land resources**: Land as a resource, land degradation, man induced landslides, soil erosion and desertification - Role of individual in conservation of natural resources- Equitable use of resources for sustainable life styles.

(10 Hours)

Unit 3: Ecosystems

Concept of an ecosystem -Structure and function of an ecosystem -Producers, consumers and decomposers- Energy flow in the ecosystem -Ecological succession-Food chains, food webs and ecological pyramids-Introduction, types, characteristic features, structure and function of the given ecosystem:- Forest ecosystem

(6 Hours)

Module II (26 Hours)

Unit 1: Biodiversity and its conservation

Introduction -Bio geographical classification of India -Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values-India as a mega-diversity nation-Hotspots of biodiversity-Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts-Endangered and endemic species of India

(8 Hours)

Unit 2: Environmental Pollution

Definition, Causes, effects and control measures of: - Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear hazards, Solid waste Management: Causes, effects and control measures of urban and industrial wastes-Role of an





individual in prevention of pollution, Pollution case studies, Disaster management: floods, earthquake, cyclone and landslides. (8 Hours)

Unit 3: Social Issues and the Environment

Urban problems related to energy, Water conservation, rain water harvesting, watershed management, Resettlement and rehabilitation of people: its problems and concerns, Case studies, Environmental ethics: Issues and possible solutions, -Climate change, global warming, acid rain, ozone layer depletion , nuclear accidents and holocaust, Case studies- 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, Public awareness (10 Hours)

Module – III (15 Hours)

Recent developments- Green Accounting- Meaning- History- Scope and Importance- Importance- Advantages and limitations- Green Banking- Meaning- benefits- coverage- steps in green banking- environmental risks for banks- Green banking initiatives- International initiatives- Initiatives in India- Green Marketing- Meaning- Need and benefits- Challenges- Green marketing in India- Green washing and consequences- Eco tourism- significance- eco tourism activities in India- Opportunities and challenges – carbon credit and carbon exchanges (over view only) - Environmental audit- concept- need and scope (15 Hours)

Module – IV (13 Hours)

Right to Information Act 2005- Basic terms- Public authority- Competent authority- Appropriate Government- Third Part- Information – record- Right to information- Objectives of the Act- Features of the Act- Obligation of Public authority- Procedure for request of information- time limit- fee- ground of rejection- appeal- exemption from disclosure- Right to access information on specific issues- Banking transactions, insurance transactions, government dealing and related services (13 Hours)

Module – V (18 Hours)

Unit 1- Human Rights– An Introduction to Human Rights, Meaning, concept and development, Three Generations of Human Rights (Civil and Political Rights; Economic, Social and Cultural Rights).

Unit-2 - Human Rights and United Nations – contributions, main human rights related organs

UNESCO, UNICEF, WHO, ILO, Declarations for women and children, Universal Declaration of Human Rights.

Human Rights in India – Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes and Minorities

Unit-3 Environment and Human Rights - Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New

Technologies such as Chemical and Nuclear Technologies, Issues of Waste Disposal, Protection of Environment

Conservation of natural resources and human rights: Reports, Case studies and policy formulation. Conservation issues of Western Ghats- mention Gadgil committee report, Kasthurirangan report. Over exploitation of ground water resources, marine fisheries, sand mining etc. (18 Hours)

Assignment may include Field study involving

Visit to a local area to document environmental grassland/ hill /mountain
Visit a local polluted site – Urban/Rural/Industrial/Agricultural Study of common plants, insects, birds etc
Study of simple ecosystem-pond, river, hill slopes, etc

Suggested Readings

1. Bharucha Erach, Text Book of Environmental Studies for undergraduate Courses. University Press, IInd Edition 2013 (TB)
2. Clark.R.S., Marine Pollution, Clarendon Press Oxford (Ref)
3. Cunningham, W.P.Cooper, T.H.Gorhani, E & Hepworth, M.T.2001 Environmental Encyclopedia, Jaico Publ. House. Mumbai. 1196p .(Ref)
4. Dc A.K.Environmental Chemistry, Wiley Eastern Ltd.(Ref)
5. Down to Earth, Centre for Science and Environment (Ref)
6. Heywood, V.H & Watson, R.T. 1995. Global Biodiversity Assessment, Cambridge University Press 1140pb (Ref)
7. Jadhav.H & Bhosale.V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284p (Ref)





SAINTGITS

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COLLEGE OF APPLIED SCIENCES

(Christian Minority Institution)

PATHAMUTTOM, KOTTAYAM - 686 532

Ph: 0481-2433787, 3292445

Estd. in 2004



CLASS RECORD & WORK REGISTER

Course Code: C05CRT15

CLASS : 15

SUBJECT : ENVIRONMENT MANAGEMENT & HUMAN RIGHTS

YEAR : 2020 - 2021

FACULTY : Asst. Prof. PREETHA THOMAS



GENERAL INSTRUCTIONS

1. Keep the work register up-to-date.
2. Avoid over-writing in entries.
3. Use red ink for marking absence and blue ink for all other entries.
4. Portions taken must be clearly indicated in the relevant page.
5. Completed work registers should be submitted to the Principal on or before 10th of every month.
6. When a subject is engaged by more than a staff member the sessional marks, attendance etc. must be consolidated and submitted.
7. Internal marks awarded must be legibly written and attested by the staff concerned.
8. Faculty should return the work register to the HOD at the end of semester or earlier if he/she leaves the department or discontinues the subject.

TIMETABLE

	I	II	III	IV	V	VI
Monday		✓				
Tuesday				✓		
Wednesday						
Thursday		✓				
Friday						

COURSE OUTCOMES

- CO1 - Outline multidisciplinary nature of Environmental Studies
- CO2 - Point out biodiversity of India
- CO3 - Scrutinize the recent developments in Environmental Studies
- CO4 - Explain Provision of RTI Act.
- CO5 - Build awareness about Human Rights

SUMMARY SHEET

Name of the Programme : BCom Model III Mascation
 Name of the Course : Environment Mgt & Human Rights
 Semester : V

Academic Year : 2020 - 2021

Batch : 2018 - 2021

S/N	Month	Syllabus Coverage in Hours		Extra Class /Tutorial	Remedial	Students Centric Learning Methods Conducted				Signature	
		Allotted	Actual			Assignments	Seminars/Viva	Quizzes	Test Papers	HOD	Principal
1.	July	15	15						1	<u>Rahul</u>	<u>R</u>
2.	Aug	14	12			2				<u>Rahul</u>	<u>R</u>
3.	Sept	8	8			1			1	<u>Rahul</u>	<u>R</u>
4.	Oct	10	10			2			1	<u>Rahul</u>	<u>R</u>
5.	Nov	13	12						1	<u>Rahul</u>	<u>R</u>
6.	Dec	9	9						1	<u>Rahul</u>	<u>R</u>
Semester Consolidation		69	66								

Sneha Thomas
Teacher-in-charge

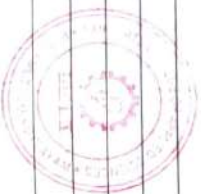
Rahul
HOD

[Signature]
Principal

2

Student Name List

Roll No.	Name	Roll No.	Name
1	Aarathi Balakrishnan	36	Midhun Thomas.
2	Darvini VR.	37	Milve Haseeb
3	Abhinav S	38	Neha Anu Joseph
4	Abhinami Vijayan	39	Nesil Varghese
5	Adarsh T Sabu	40	Nidhin Raj
6	Ana Rachel Varghese	41	Payitra Jini
7	Ayo Alur	42	Prayanka Anna
8	Akash Deepu	43	Ran P Thomas
9	Akhil Jacob	44	Riya Elsa Puthups
10	Aleshayman Samuel	45	Selin Pradeep
11	Albin Abraham	46	Sandya Adur Thomas
12	Anan George.	47	Sandya Nirao
13	Aneta Susan George	48	Sandya Susan
14	Anil Jayathri	49	Sharadke Shaji
15	Anu Mj	50	Sneha Sana Mathew
16	Anurag Ak	51	Sneha Thomas
17	Anavind Raghupad	52	Sneha Kalyani.
18	Anomal Raveendran	53	Stacy Elsa John
19	Ashly Sana Keshav	54	Stenithal Elsa
20	Aswin P Kumara J	55	Tibin Thomas
21	Athira Mohan	56	Vasishath Babu
22	Bala Krishnan T	57	Vishnuvarg B.
23	Christena Maria		
24	Edin Joy		
25	Emil George Eshen		
26	Jacob Kevin Mathew		
27	Jake Roncy		
28	Jalitha		
29	Johan George		
30	Jyothi Krishna		
31	K Anmol Aji		
32	K Prudip Thomas		
33	Kabin Kariakose		
34	Mawon Dommen.		
35	Meenu Em		



3

Learning Outcomes

S/N	Learning Outcomes
	<u>Module - I.</u>
1)	Develop an idea about renewable & non renewable resources
2)	Identify forest resources
3)	Explain mineral Resources
4)	Classify food resources
5)	Outline Energy resources
6)	Explain land resources
7)	Build an idea regarding role of individuals in conservation of resources
8)	Demonstrate equitable use of resources
9)	Summarise Ecosystems
10)	Extend knowledge of Structure & functions of ecosystem.
11)	Summarise food chain & food web
12)	Classify forest resources
13)	Module Test - Identify knowledge regarding multi disciplinary nature of Env't studies.
	<u>Module - II</u>
14)	Identify biological classification of India
15)	Outline Threats to biodiversity
16)	Explain man wildlife conflict
17)	Explain Environmental pollution.
18)	Identify air, water & soil pollution.
19)	Explain Nuclear Hazards
20)	Extend knowledge of solid waste mgt
21)	Identify role of individuals in prevention of pollution
22)	Outline social issues of environment
23)	Demonstrate urban problems related to energy
24)	Build awareness regarding water conservation.
25)	make use of rain water harvesting methods
26)	Explain watershed mgt.
27)	Explain global warming
28)	Summarise resettlement & rehabilitation
29)	Explain Acid rain, Climate change, ozone layer.
30)	Identify various Environment Protection Acts
31)	Extend knowledge of forest conservation & public awareness.



Learning Outcomes

S/N	Learning Outcomes
32)	Module Test - Identify biodiversity & conservation
	<u>Module - III</u>
33)	Extend knowledge of Green Accounting
34)	Analyse importance of Green Accounting
35)	Compare adv and limitations of Green Acc
36)	Analyse Green banking initiatives
37)	Examine consequences of Green Washing
38)	Construct an idea regarding Ecotourism
39)	Explain significance & opportunities of ecotourism.
40)	Define Environment Audit.
41)	Discover need & scope of Env't Audit.
42)	Build awareness of Carbon Credit & Exchange
43)	Module Test - Identify recent developments
	<u>Module - IV</u>
44)	Explain Right to Information Act 2005
45)	Identify Competent Authority
46)	Examine Appropriate Govt.
47)	Evaluate Right to Information
48)	Judge the objectives & features of the Act-
49)	Determine procedure for request of information
50)	Explain RTI in banking, Govt dealing.
51)	Module Test -
	<u>Module V</u>
52)	Explain meaning of Human Rights-
53)	Discover Human rights concept & development
54)	Assess 3 generations of Human Rights
55)	Explain role of UN in Human Rights
56)	Develop idea of declaration for women & children.
57)	Discuss UDHR
58)	Explain fundamental rights to SC/ST
59)	Examine public safety measures, Clean Env't
60)	Evaluate the issues of waste disposal.
61)	Explain conservation of natural resources & HR.
62)	Examine Gadgil, Kasturirangan reports
63)	Module Test -



Lesson Plan

Module: Multidisciplinary Nature of Env't Studies Hours Required: 13
 Course: Environment Mgt & Human Rights Hours Engaged: 13
 Outcome: Outline the multidisciplinary nature of Env't Studies

S/N	Topic	Content Delivery method	Proposed		Actual		Remarks
			Date	Hour	Date	Hour	
1)	Renewable & non-renewable resources	PPT / group discussion	9/7	2	9/7	2	
2)	Forest Resources	PPT	10/7	4	10/7	4	
3)	Mineral Resources	PPT	13/7	2	13/7	2	
4)	Food Resources	PPT	14/7	4	14/7	4	
5)	Energy Resources	PPT	15/7	5	15/7	5	
6)	Land Resources	PPT	16/7	2	16/7	2	
7)	Role of ind in conservation	Seminar	17/7	4	17/7	4	
8)	Equitable use of resources.	PPT	21/7	4	21/7	4	
9)	Ecosystems	video	22/7	5	22/7	5	
10)	Structure & functions.		23/7	2	23/7	2	
11)	Food chain & food web	PPT	24/7	4	24/7	4	
12)	Forest as a Resource.	PPT	27/7	2	27/7	2	
13)	Module Test - identify multi-disciplinary nature of Env't Studies		28/7	4	28/7	4	

Lesson Plan

Module: Biodiversity & Conservation Hours Required: 19
 Course: Environment Mgt & Human Rights Hours Engaged: 19
 Outcome: Point out the biodiversity of India.

S/N	Topic	Content Delivery method	Proposed		Actual		Remarks
			Date	Hour	Date	Hour	
1)	biological classification	PPT	21/7	5	21/7	5	
2)	Threats to biodiversity	PPT	30/7	2	30/7	2	
3)	Man wildlife conflict	PPT	3/8	2	3/8	2	
4)	Env't Pollution	video	6/8	2	6/8	2	
5)	Air, water, soil pollution	Discussion	7/8	2	7/8	2	
6)	Nuclear Hazards	Seminar	10/8	2	10/8	2	
7)	Solid Waste Mgt	Seminar	11/8	4	11/8	4	
8)	Role of ind.	Discussion	13/8	2	13/8	2	
9)	Social Issues.	PPT	14/8	4	14/8	4	
10)	Urban problems.	PPT	17/8	2	17/8	2	
11)	Water conservation	PPT	18/8	4	18/8	4	
12)	Rainwater Harvesting	video / Discussion	20/8	2	20/8	2	
13)	Wasteland Mgt.	PPT	21/8	4	21/8	4	
14)	global Warming	Seminar	24/8	2	24/8	2	
15)	Resettlement & rehabilitation	Seminar	11/9	4	11/9	4	
16)	Acid rain ozone layer.	PPT	14/9	2	14/9	2	
17)	Env't Protection Acts.	PPT	15/9	4	15/9	4	
18)	Forest Conservation	PPT	17/9	2	17/9	2	
19)	Module Test - Biodiversity & Conservation.		22/9	4	22/9	4	

Lesson Plan

Module: Recent Developments Hours Required: 11
 Course: Env't Mgt & Human Rights Hours Engage.d: 11
 Outcome: Scrutinize recent developments in Env't Studies

S/N	Topic	Content Delivery method	Proposed		Actual		Remarks
			Date	Hour	Date	Hour	
1)	Green Accounting	Seminar	24/9	2	24/9	2	
2)	Importance - G.Mk	PPT	28/9	2	28/9	2	
3)	Adv & limitations	PPT	29/9	4	29/9	4	
4)	Green Banking	Discussion	1/10	2	1/10	2	
5)	Green Washing	PPT	9/10	2	9/10	2	
6)	Ecotourism	Seminar	6/10	4	6/10	4	
7)	Opportunities & Significance	Discussion	8/10	2	8/10	2	
8)	Env't Audit	PPT	12/10	2	14/10	2	
9)	Scope & Need	PPT	13/10	4	13/10	4	
10)	Carbon Credit & Carbon Exchange	PPT	15/10	2	15/10	2	
11)	Module Test - Identify recent developments		19/10	2	19/10	2	



Lesson Plan

Module: Right to Information Act 2005 Hours Required: 8
 Course: Env't Mgt & Human Rights Hours Engage.d: 8
 Outcome: Explain Provisions of RTI Act

S/N	Topic	Content Delivery method	Proposed		Actual		Remarks
			Date	Hour	Date	Hour	
1)	RTI Act 2005	PPT	20/10	4	20/10	4	
2)	Competent Authority	PPT	22/10	2	22/10	2	
3)	Appropriate Govt	PPT	2/11	2	2/11	2	
4)	Evaluate RTI	PPT	5/11	2	5/11	2	
5)	Obj & features	PPT	9/11	2	9/11	2	
6)	Procedure to request info	Seminar	10/11	4	10/11	4	
7)	RTI for banking govt dealings	PPT	12/11	2	12/11	2	
8)	Module Test		16/11	2	16/11	2	
	-						



Lesson Plan

Module: Human Rights Hours Required:
 Course: Env't Mgt & Human Rights Hours Engaged:
 Outcome: Build awareness about Human Rights.

S/N	Topic	Content Delivery method	Proposed		Actual		Remarks
			Date	Hour	Date	Hour	
1)	Human Rights - Meaning.	PPT	17/11	4	17/11	4	
2)	Development of HR	PPT	19/11	2	19/11	2	
3)	3 generations of HR	Seminar	23/11	2	23/11	2	
4)	Role of UN in HR	PPT	24/11	4	24/11	4	
5)	Declaration for Women & children	PPT	26/11	2	26/11	2	
6)	UDHR.	PPT	30/11	2	30/11	2	
7)	Rights to SC/ST	PPT	1/12	4	1/12	4	
8)	Env't & HR	PPT	3/12	2	3/12	2	
9)	Issues of waste disposal	PPT	7/12	2	7/12	2	
10)	Conservation of natural resources	PPT	8/12	4	8/12	4	
11)	Gadgil, Kasturba report	PPT	14/12	2	14/12	2	
12)	Module Test		15/12	4	15/12	4	



Details of Seminar/ Assignment/ Viva/ Quiz/ Test Paper

S/N	Topic	Proposed date of		Actual date of		Type (Seminar/ Assignment/ Viva/ Quiz/ Test Paper)	Remarks
		Allocation	Submission	Allocation	Submission		
1)	Role of individual in conservation of Environment	3/8	3/8	3/8	3/8		
2)	Role of individual in prevention of pollution	15/8	15/8	15/8	15/8		
3)	RTI Act	30/9	30/9	30/9	30/9		
4)	Rights for Women & children.	6/10	6/10	6/10	6/10		
5)	Module Test - 1	28/7	28/7	28/7	28/7		
6)	Module Test - 2	22/9	22/9	22/9	22/9		
7)	Module Test - 3	19/10	19/10	19/10	19/10		
8)	Module Test - 4	16/11	16/11	16/11	16/11		
9)	Module Test - 5	15/12	15/12	15/12	15/12		
10)	Recent Developments	19/10	19/10	4/1	4/1		

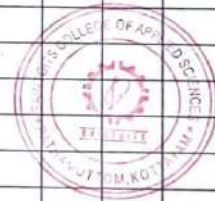


Details of Assessment

Roll.No	Assignment					Class Test Paper					Internal I	Internal II	Attendance %
	1	2	3	4	5	1	2	3	4	5			
1	5	5	4	5	5	10	9	10	9	9	22	33	5
2	5	4	5	5	5	10	9	8	9	10	23	63	5
3	5	5	5	5	5	9	10	9	8	9	20	51	5
4	5	4	3	4	5	9	9	9	9	9	22	40	3
5	4	4	5	5	4	7	6	5	0	8	20	33	4
6	5	4	5	5	5	8	9	7	7	0	21	56	5
7	5	4	4	5	5	0	9	7	8	9	22	53	5
8	5	0	4	4	5	7	0	0	8	8	21	49	4
9	4	4	5	5	4	9	9	9	9	9	20	46	5
10	4	4	5	5	4	10	9	10	9	9	20	38	3
11	5	5	4	4	5	9	10	9	8	8	19	51	5
12	4	4	5	4	4	8	0	7	0	8	20	31	3
13	5	5	4	5	5	8	7	8	9	10	23	58	5
14	5	4	5	5	5	8	8	0	8	0	20	64	4
15	5	5	5	4	5	8	9	10	10	10	21	68	5
16	4	5	4	4	5	10	9	10	9	10	20	38	4
17	5	5	5	4	5	9	8	7	9	9	22	60	5
18	4	4	3	4	4	9	10	9	8	9	21	28	3
19	4	3	4	3	4	9	9	10	9	10	23	28	4
20	4	5	5	4	3	9	10	9	8	10	20	27	3
21	5	4	4	5	5	9	0	0	0	6	20	53	3
22	4	4	5	5	4	10	9	8	8	7	22	43	5
23	5	4	5	4	5	9	10	8	10	9	23	55	4
24	5	5	5	4	5	10	9	10	9	9	22	59	5
25	4	5	5	5	4	9	8	9	8	8	20	46	5
26	4	5	5	5	4	8	7	8	9	9	23	52	5
27	5	4	4	5	5	10	9	9	9	10	21	48	5
28	5	4	4	5	5	6	9	9	10	9	21	63	6
29	5	4	4	5	4	10	9	10	9	9	23	58	5
30	4	4	5	4	4	7	8	7	9	8	18	33	5
31	4	4	5	3	9	0	0	7	0	17	9	3	
32	4	5	4	5	8	9	8	9	8	23	59	5	
33	5	5	5	0	8	0	0	0	7	18	8	3	
34	5	5	5	5	10	10	10	10	9	21	72	5	
35	4	4	5	4	10	9	9	10	8	22	60	5	

Details of Assessment

Roll.No	Assignment					Class Test Paper					Internal I	Internal II	Attendance %
	1	2	3	4	5	1	2	3	4	5			
36	4	5	4	4	5	10	9	9	10	9	22	58	5
37	5	4	5	4	5	10	10	9	9	10	21	62	5
38	5	4	5	4	5	10	9	9	10	10	22	62	5
39	4	5	5	5	4	9	9	8	9	9	21	56	5
40	4	4	4	5	4	8	7	8	7	8	22	40	5
41	5	4	5	4	5	9	8	9	8	9	23	56	5
42	4	5	5	4	5	8	7	8	7	8	23	50	5
43	5	4	5	4	5	6	7	7	8	8	23	45	5
44	5	5	5	5	5	10	10	10	9	10	22	72	5
45	4	4	5	5	4	8	8	8	8	8	22	50	5
46	4	5	5	4	5	8	9	9	8	8	21	58	5
47	4	4	4	5	5	8	7	8	9	8	23	52	5
48	5	5	4	4	5	10	9	9	9	8	21	63	5
49	5	4	4	4	5	9	10	9	8	7	19		5
50	5	4	5	4	4	9	8	8	9	9	21	59	5
51	5	4	4	4	5	9	8	9	9	10	22	58	4
52	4	5	4	5	4	8	8	7	7	8	20	48	5
53	5	5	4	4	5	9	10	9	10	9	23	65	5
54	5	5	4	5	4	10	9	10	10	10	22	64	5
55	4	5	5	5	4	9	9	9	9	9	22	60	5
56	4	3	4	3	4	9	8	6	5	4	19	19	3
57	4	4	5	5	4	9	8	9	10	9	20	53	5



Additional Information

Revision of module I & II done
on 17/12(2), 28/12(2) & 29/12(4).

Revision of module III, IV & V done,
as contact classes.

for Roll No: 1 - 29 on 4/1 (1) 6/1 (3) & 14/1 (4)
30 - 57 on 7/1 (3 & 4) and 15/1 (3)



CO5CRT15: Environment Management and Human Rights

CO1- Outline multidisciplinary nature of environmental studies.	Applying
CO2- Point Out the biodiversity of India.	Applying
CO3 - Scrutinize the recent development in environmental studies.	Analysing
CO4- Explain the provisions of Right to information Act.	Evaluating
CO5- Build awareness about human rights.	Creating





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First Internal Examination, September 2020

**Department of Commerce (Computer Application & Taxation,
Semester V**

ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS

SET A

Total : 25marks

Time: 1 hour

Section A

Answer any 2 questions. Each question carries 5 marks.

1. Explain pollution and its types?
2. Explain global environment issues?
3. Explain the natural disasters and measures to manage them.

(5 X 2 = 10)

Section B

Answer any 1 question. It carries 15 marks.

4. What are natural resources? What are the problems associated with natural resources?
5. 'The science of Environment studies is a multidisciplinary science' – Explain.

(15 X 1 = 15)





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First Internal Examination, September 2020

**Department of Commerce (Computer Application & Taxation,
Semester V**

ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS

SET B

Total : 25marks

Time: 1 hour

Section A

Answer any 2 questions. Each question carries 5 marks.

1. Critically evaluate the resettlement issues
2. What is air pollution? What are its causes and effects?
3. Explain the role of individuals in prevention of pollution.

(5 X 2 = 10)

Section B

Answer any 1 question. It carries 15 marks.

4. Explain the various types of renewable and non-renewable resources.
5. Critically examine the impact of modern agriculture and over-grazing on the environment.

(15 X 1 = 15)

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First Internal Examination, September 2020

**Department of Commerce (Computer Application & Taxation,
Semester V**

ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS

SET C

Total : 25marks

Time: 1 hour

Section A

Answer any 2 questions. Each question carries 5 marks.

1. Explain Watershed Management
2. What are bio diverse hotspots? List the famous bio diverse hotspots in India.
3. What are the causes and effects of noise pollution?

(5 X 2 = 10)

Section B

Answer any 1 question. It carries 15 marks.

4. Explain the role of an individual in the conservation of natural resources.
5. Explain the scope and importance of environmental management?

(15 X 1 = 15)





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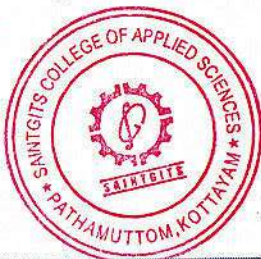
Instructions to Students

1. Exam should be written in A4 sheets only.
2. Use Blue or Black ball point pen only.
3. Page number, name, roll number and class should be written on each side of the sheet.
4. After completing the exam, handwritten answers should be turned in as a single PDF file (Use of Adobe scan or Microsoft Office lens App are advised). Upload the PDF in Microsoft teams channel before the deadline.
5. PDF of the scanned handwritten answers should be uploaded within the allotted time.
 - a. Forenoon session: - Before 11:05 AM
 - b. Afternoon session: - Before 3:05 PM
6. Marks will be taken as your internals.
7. One long essay question of 15 marks and two short essay questions of 5 marks each. Total 25 marks exam for 1-hour duration.
8. Any kind of discussion among the candidates during the exam may result in cancellation of the exam.
9. In case of any doubts regarding questions / technical difficulties during the examination, the same should be brought to the notice of your respective Class teacher / Mentor / Subject teacher via Microsoft Teams/ WhatsApp/ Mobile.
10. Attendance will be taken in the forenoon session at 9:30 AM and 1:30 PM in the afternoon session by the class teacher / mentor.

Exam Cell 2020 – 21

Saintgits College of Applied Sciences

Principal





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First Internal Examination, September 2020
Department of Commerce(Computer Application & Taxation)
Semester V
ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS
SET A
Answer Scheme

Section A

Answer any 2 questions. Each question carries 5 marks.



- I. Explain pollution and its types?

ENVIRONMENTAL POLLUTION:

Environmental pollution is defined as “the contamination of the physical and biological components of the earth/atmosphere system to such an extent that normal environmental processes are adversely affected”.

Air Pollution :Air pollution occurs when harmful or excessive quantities of substances including gases, particles, and biological molecules are introduced into Earth's atmosphere. It may cause diseases, allergies and even death to humans; it may also cause harm to other living organisms such as animals and food crops, and may damage the natural or built environment. It is caused by both human activity and natural processes.

Water Pollution:Water pollution can be defined as the contamination of a stream, river, lake, ocean or any other stretch of water, depleting water quality and making it toxic for the environment and humans.

Soil Pollution:Soil pollution refers to anything that causes contamination of soil and degrades the soil quality. Soil pollution is when humans introduce harmful objects, chemicals or substances, directly or indirectly into the soil in a way that causes harm to other living things or destroys soil or water ecosystems. Soil pollution is often considered as a hidden danger, because it is a kind of pollution that is not easily visible to the eye, although its effects can be very far reaching.

Marine Pollution:Marine pollution refers to direct or indirect introduction by humans of substances or energy into the marine environment, resulting in harm to living resources, hazards to human health, hindrances to marine activities including fishing, impairment of the quality of sea water and reduction of amenities.

Noise pollution:Noise Pollution refers to unwanted or excessive sound that can have deleterious effects on human health and environmental quality. Noise pollution is commonly generated inside many industrial facilities and some other workplaces, but it also comes from highway, railway, and airplane traffic and from outdoor construction activities.

Thermal Pollution:Thermal pollution is defined as sudden increase or decrease in



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temperature of a natural body of water which may be ocean, lake, river or pond by human influence. This normally occurs when a plant or facility takes in water from a natural resource and puts it back with an altered temperature. Usually, these facilities use it as a cooling method for their machinery or to help better produce their products.

Nuclear Hazards: Risk or danger to human health or the environment exposed by the radiation emanating from the atomic nuclei is called as nuclear hazard. Nuclear hazard is an actual or potential release of radioactive material at a commercial nuclear power plant or a transportation accident.

2. Discuss the global environment issues.

Urban Problems Related to Energy

The energy requirements of urban population are much higher than that of rural ones. This is because urban people have a higher standard of life and their life style demands more energy inputs in every sphere of life.

Acid Rain

Acid rain describes any form of precipitation that contains high levels of nitric and sulfuric acids. It can also occur in the form of snow, fog, and tiny bits of dry material that settle to Earth.

Climate Change

Climate change occurs when changes in Earth's climate system result in new weather patterns that last for at least a few decades, and maybe for millions of years. The climate system is comprised of five interacting parts, the air, water, living things and earth's crust. The climate system receives nearly all of its energy from the sun, with a relatively tiny amount from earth's interior. The climate system also gives off energy to outer space. The balance of incoming and outgoing energy, and the passage of the energy through the climate system, determines Earth's energy budget.

Global Warming

Global warming is primarily a problem of too much carbon dioxide in the atmosphere, which acts as a blanket, trapping heat and warming the planet. As we burn fossil fuels like coal, oil and natural gas for energy or cut down and burn forests to create pastures and plantations, carbon accumulates and overloads the atmosphere. Certain waste management and agricultural practices aggravate the problem by releasing other potent global warming gases, such as methane and nitrous oxide.

Ozone layer Depletion

The Ozone layer is a deep blanket in the stratosphere made up of comparatively high concentration of the ozone. The ozone layer encircles the earth and occurs naturally. It is mainly found in the lower part of the stratosphere, approximately 15 to 30 kilometres above the earth. The ozone is an extremely reactive layer and it acts as a shield from the harmful ultraviolet B rays discharged from





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the sun. The ozone layer is continually being generated and broken down owing to several atmospheric processes and chemical reactions. This makes the thickness of the ozone layer to vary geographically and seasonally.

Nuclear Holocaust

A Nuclear Holocaust is the envisaged result of a nuclear war or nuclear accident, especially one involving widespread destruction of life and the environment. **A nuclear holocaust** would lead to widespread destruction, possibly causing the collapse of civilization, through the use of nuclear weapons. Under such a scenario, some of the Earth could be made uninhabitable by nuclear warfare in future world wars.

3. Assess the natural disasters and measures to manage them.

Disaster is a sudden calamity which brings misfortune and miseries to humanity

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

Types of disasters

There is no country that is immune from disaster, though vulnerability to disaster varies. There are two main types of disasters:

1. Natural disaster: Floods, Cyclones, earth quakes, landslides. etc
2. Man- made disaster: Accidents, pollutions, fire accidents, bomb blasts.

Floods

Defined as a situation when the river over flows its banks and the water spreads in the surrounding areas and submerging them. It usually occurs in rainy season

Causes:

1. Heavy intense rain fall
2. Melting of accumulated snow.
3. Melting of snow combine with rains.
4. over saturated soil when the ground cannot hold any more water.
5. Urbanization

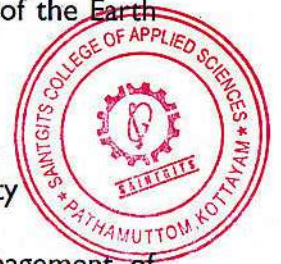
Control:

1. Forecast, warning and advice should be provided through media to educate aware people about steps to be taken on the event of mishap.
2. Valuable house hold items, animals and materials like food, clothes, medicines etc. should be shifted to safe places.
3. Elderly people and children should be evacuated to safer place on emergency.
4. By the construction of protective works.

Cyclone

An atmospheric closed circulation, rotating anti- clock wise in the northern hemisphere and clock wise in southern hemisphere .

Cyclone is an area of low pressure in the centre and high pressure outside. Powerful swirling storm that measures from 300- 500 km in diameter.





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The wind in the centre of cyclone blows in the speed of 120km/hr. In India cyclone originates from Bay of Bengal are more in number and intensity. **Earthquake** Relatively less south-west Indian Ocean and Arabian Sea. In India cyclones occur during October-December or April-May.

Effects:

Damage to human life, crops, roads, transport, and communication could be heavy. Cyclone slows down developmental activities of the area.

Management:

Meteorological Departments forecast by satellite images the weather conditions which reveal the strength and intensity of the storm. Systems is used to detect cyclone and cyclone warning.

The effect of cyclone is minimized by planting more trees on the coastal belts, constructional dams, wind breaks etc.

Sudden vibration caused on the earth surface due to sudden release of tremendous amount of energy stored in the rocks under the earth crust is called earthquake.

A focus of an earthquake is the point of initial movement. Epicenter is the point on the surface directly above the focus.

Measure of Earth quake-Richter scale:

Magnitude of earthquake is a measure of amount of energy released in the earthquake.

Earthquake is recorded by seismograph.

Less than 4-insignificant.

-4.9-minor,

5-5.9-damaging,

6-6.9-destructive, 7-7.9-major,

Above 8- great

Primary effect of earth quake:

Shaking

Sometimes a permanent vertical or horizontal displacement of the ground. This affects people bridges, dams, pipe lines.

Secondary effects: Rocks slides, flood caused by the subsidence of land, coastal areas are severely damaged .

Earth quake generated water wave called Tsunami and also called tidal waves that travel as fast as 950km/hr.

Precautionary measures:

1. People should come out of their homes and stay in the open till the tremors subside.
2. People already out of home should stay away from the building electric poles, trees and any tall objects that have chances of falling down.
3. After the earth quake relief camp by the Government or other social groups should be conducted for the affected people.

Land slides:

A landslide is a sudden collapse of large mass of hill side.





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Types:

Shallow disrupted land slide and decoherent landslide.

Factors causing landslides:

Caused by rain forces increasing top material weight, lubricating the material layer or making slope top steep. Gravity-gravity works more effectively on steeper slopes
Weather: Most slides occur during or after heavy rains.

Effects:

Flow deposit blocks the road and diverts the passage. Causes of erosion of the soil.

Prevention:

Revegetate the area to prevent the surface erosion.
Inspect and repair all drainage system.
Collect runoff from roofs and improved areas and convey water from the steep slopes in a well designed pipe system

Tsunami

It is a Japanese word which means harbour wave.

'Tsu' means harbour and 'nami' stands for wave.

Tsunami is large waves of water generated when the sea flow is deformed by seismic activity, vertically displacing the overlying water in the ocean.

Phenomenon:

Tsunami is not a singular wave but a series of waves like a ordinary waves one can see on a beach. Ordinary eaves have the wavelength of 100 mts. Tsunami have a wavelength of 500 kms and there could be as much as a hairs gap between eaves.

The speed of Tsunami waves across deep sea is 1000 km/hr.

The energy lost by tsunami waves is inversely proportional to the wavelength. Tsunami was extremely fast moving and high volume of water. The waves are several hundreds of kms of waves and travelling 1000 km/hr.

Effects:

Tsunami attacks mostly the coastal lines damaging property and life. Kills lot of human being and livestock also spread lot of waterborne disease.

Management:

Earthquake under the sea are monitored by sensors on the floor of sea. The sensors send information of floating buoys on the surface whenever they detect the change in the pressure of the sea. The information is relied to satellite which passes it to the earth station. All member nations waning system are warned of the approaching danger .Finally the country make the people alert to make all necessary precautions

Section B

Answer any 1 question. It carries 15 marks.

4.What are natural resources? Evaluate are the problems associated with natural resources?

Natural Resources:



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All things that are useful to us are called resources. Air, water, land, soil, forest etc are all resources. Resources are useful raw materials that we get from nature. These are naturally occurring materials. They are useful to us in many ways, and we keep developing new ways to use them or convert them into useful things. .

Classification of Resources

Resources can be classified on the basis of their replenishing ability into:

- Renewable resources
- Non Renewable resources

Renewable resources

Renewable resources are those resources that can be replenished or renewed naturally over a period of time. Air, water, wind, solar energy etc are all renewable resources.

1. Solar energy: Sun is a big source of energy. The energy that we get from the Sun is called solar energy. All natural phenomenon like the flowing of wind, water cycle, photosynthesis etc are possible only due to solar energy. Solar energy is also used to cook food, heat water, light streets, pump water for irrigating fields etc.

2. Hydro-Energy: Water is another important natural resources. All living organisms need water to live. Human beings need water for many purposes such as drinking, cleaning, cooking and for growing crops. Water flowing into the river or water stored in a dam are sources of hydro energy.

3. Wind energy: Wind is another resource available in nature. The windmill is a source of electrical energy. The energy from wind is used for grinding grain, pumping water and to produce electricity. In India, many windmills have been set up in different places such as Tamil Nadu, Maharashtra, Rajasthan, Kerala, West Bengal and Gujarat.

4. Biogas: Biogas is a type of fuel which is a mixture of gases such as methane, carbon dioxide, hydrogen etc which is obtained by decomposition of animal and plant wastes like animal dung, with the help of micro-organisms in the presence of water. It is used as fuel in gas stove especially in rural areas.

5. Wood: Wood is an ancient and traditional source of energy. It is mainly a mixture of many carbohydrate compounds. In many villages in India, wood is still used to cook food every day. While having ill effects on the environment, it is also harmful to human health.

6. Hydrogen: It is a good source of energy because it does not create pollution and it produces maximum energy on burning. Hydrogen has the potential to be the answer to all our energy and fuel troubles. Technology is currently being developed to fully utilize hydrogen





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efficiently as a fuel.

7. Alcohol: Alcohol has many commercial and medical applications. It can be used for producing energy. It is obtained while making sugar from sugarcane. Hence, it is a very cheap source of energy. A mixture of petrol and alcohol is used as fuel in automobiles. This mixture is called 'Gasohol'.

8. Air: All living things need air to breathe. It is an important natural resource.

9. Water: All living things depend on water for survival. Water cycle ensures that we will never run out of the water, yet clean and drinking water is scarce in the world.

10. Soil: It is an important resource as this is the layer where plants grow. We get most of our food from crops grown in the soil.

Non Renewable resources

Non-renewable resources are those natural resources that are available in limited quantity. These resources cannot be renewed or replenished in the short duration. Therefore these resources are also known as exhaustible resources. Examples- coal, natural gas, petroleum etc.

1. Fossil fuel: Fossil fuels such as coal and petroleum are non-renewable resources. They are found deep inside the earth and are made by natural processes over long periods of time. Their quantity is limited and they take thousands of years to get renewed. Examples of fossil fuels are coal, petroleum, natural gas etc.

- **Coal:** It is also known as black diamond. Coal is used as a fuel, to generate electricity, in factories and in steam engines.
- **Natural gas:** Natural gas is used as a fuel and is called Compressed Natural Gas or CNG. They are a good alternative to petrol and diesel. It burns easily and produces a lot of heat. It is a good source of hydrogen.
- **Petroleum:** Petroleum is also known as mineral oil or crude oil. This liquid mineral is refined to make fuels such as petrol, diesel, cooking gas and kerosene. It is also used in products such as plastic, cosmetics, and lubricants. It is found deep inside the earth or under the sea bed.

2. Nuclear energy: They are another kind of non-renewable resource. This is because the fuel used for nuclear energy is uranium, which is in limited supply. Production of electricity from nuclear energy does not release carbon dioxide. Hence, the use of nuclear energy is safe for the environment.

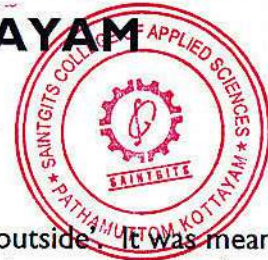
Natural Resources and associated problems:





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Forest Resources:

The word 'forest' is derived from the Latin word 'foris' meaning 'outside'. It was meant to indicate that forest was a place outside the boundary of human existence. In India, forests form 23 percent of the total land area.

A forest is a natural, self-sustaining community characterized by a vertical structure created by the presence of trees. Forest can exist in many different regions under a wide range of conditions.

Forest being a natural community, is not static in time. This is, because forest communities respond to outside influences, such as rainfall, fire, wind, glaciation, seismic activity, flooding, animal activity etc.

Use and Over Exploitation:

A forest is a biotic community predominantly of trees, shrubs and other woody vegetation, usually within a closed canopy. This invaluable renewable natural resource is beneficial to m

Human Interactions with Forests:

Human are indisputably a part of most forests. With the exception of extremely inaccessible forestlands, all forests present on Earth today have been influenced by human being for years.

Because of the widespread nature of human activity in forests, it may be considered as one of the factors influencing forest development.

Human beings have always realized the benefits from forest lands in the form of medicines, shelter, food, fuel and more. Often, humans have sought to manipulate the natural processes so as to compel forest systems to produce more goods and services as desired by people.

At times, human management has become so extensive that it was considered as the primary set of factors under which the forest system operates. Because of this human interference, such systems resemble agricultural systems and cannot be thought of as forests in the natural sense, although they may continue to resemble forests superficially.

Deforestation:

Deforestation refers to the cutting, clearing, and removal of rainforest or related ecosystems into less bio-diverse ecosystems such as pasture, cropland, or plantations (Kricher, 1997).

It is the permanent destruction of indigenous forests and woodlands. It does not include the removal of industrial forests such as plantations of gums or pines.

Causes of Deforestation:

(I) Population Explosion:

Population explosion poses a grave threat to the environment. Vast areas of forest land are



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cleared to claim land for human settlements (factories, agriculture, housing, roads, railway tracks etc.) Also growth of population increases the demand for forest products like timber, firewood, paper and other valuable products of industrial importance, also leading to cutting of trees.

(2) Forest Fires:

Fires in forests due to natural calamities or human activities also lead to clearing of trees and thereby deforestation. Fire destroys fully grown trees, results in killing and scorching of the seeds, humus, ground flora and animal life.

(3) Grazing Animals:

Trampling of the forest soil in the course of overgrazing by cattle has far reaching effects such as loss of porosity of soil, soil erosion and desertification of the previously fertile forest area.

(4) Pest Attack:

Forest pests like insects etc. destroy trees by eating up the leaves, boring into shoots and by spreading diseases.

(5) Natural Forces:

Natural forces like floods, storms, snow, lightening etc also damage forests.

Effects of Deforestation:

Forests are closely related with climatic change, biological diversity, wild animals, crops, medicinal plants etc. Large scale deforestation has many far-reaching consequences:

- (a) Destruction of habitat of wild animals –tree using animals are deprived of food and shelter.
- (b) Increased soil erosion due to reduction of vegetation.
- (c) Reduction in the level of oxygen liberated by plants through photosynthesis.
- (d) Increase in pollution due to burning of wood and due to reduction in carbon-dioxide fixation by plants.
- (e) Decrease in availability of forest products.
- f) Lowering of the water table due to more water run-off, leading to increased use of the underground water increasing the frequency of droughts.
- (g) Loss of Biodiversity
- (h) Scarcity of fuel wood and deterioration in quality of life of people residing near forests.
- (i) Rise in Carbon dioxide level resulting in increased thermal level of earth which in turn results in melting of ice caps and glaciers and consequent flooding of coastal areas

Water Resource

Water resources are sources of water that are useful or potentially useful to humans. It is important because it is needed for life to exist. Many uses of water include agricultural, industrial, household, recreational and environmental activities.

Water is generally classified into two: **surface water and groundwater.**





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Groundwater is located underground in large aquifers and must be pumped out of the ground after drilling a deep well.

Surface water is found in lakes, rivers and streams and is drawn into the public water supply by an intake

Overuse and Depletion of Ground Water

Groundwater is the largest source of usable, fresh water in the world. In many parts of the world, especially where surface water supplies are not available in sufficient quantities, domestic, agricultural, and industrial water needs are met by using the water beneath the ground.

The U.S. Geological Survey compares the water stored in the ground to money kept in a bank account. If the money is withdrawn at a faster rate than it is deposited, there will eventually be shortage of money. Pumping water out of the ground at a faster rate than it is replenished over the long-term causes similar problems.

Groundwater depletion is primarily caused by sustained groundwater pumping. Some of the negative effects of groundwater depletion are:

- **Lowering of the Water Table:** Excessive pumping can lower the groundwater table, and cause wells to no longer be able to reach groundwater.
- **Increased Costs:** As the water table lowers, the water must be pumped farther to reach the surface, using more energy. In extreme cases, using such a well can be cost prohibitive.
- **Reduced Surface Water Supplies:** Groundwater and surface water are connected. When groundwater is overused, the lakes, streams, and rivers connected to groundwater can also have their supply diminished.
- **Land Subsidence:** Land subsidence occurs when there is a loss of support below ground. This is most often caused by human activities, mainly from the overuse of groundwater, when the soil collapses, compacts and drops.
- **Water Quality Concerns:** Excessive pumping in coastal areas can cause saltwater to move inland and upward, resulting in saltwater contamination of the water supply.

Problems of Dams:

Dams may face problems upstream or downstream as listed below:

Upstream problems:

1. Displacement of tribal people
2. Loss of non-forest land
3. Loss of forests, flora and fauna
4. Landslides, sedimentation and siltation occurs





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5. Stagnation and water logging around reservoirs retards plant growth
6. Reservoir Induced Seismicity (RIS) causes earthquakes
7. Navigation and aquaculture activities can be developed in the dam area

Downstream problems:

1. Water logging and salinity due to over irrigation
2. Reduced water flow and silt deposition in rivers
3. Salt intrusion at river mouth
4. Since the sediments carrying nutrients gets deposited in the reservoir, the fertility of the land along the river gets reduced
5. Structural defects or faulty design of the dam, may cause sudden dam failure leading to collapse and destruction to life and property

Mineral Resources:

Minerals are naturally occurring elements or compounds that have been formed through slow inorganic processes. Modern civilization is based on the use and exploitation of mineral resources. Minerals can be metallic and non-metallic.

Minerals are not evenly distributed in the Earth. Some countries are rich in mineral deposits whereas others are devoid of it.

Use of mineral resources is an integral part and one of the key requirements of development worldwide. With rapid increase in population and a more rapid increase in society's development needs, the requirements for minerals have grown and diversified manifold.

Extraction of minerals is carried out through mining. Minerals are extracted from beneath the surface, processed, and used for different purposes.

Mineral resources, however, are exhaustible and finite, which means excessive use may affect their availability in the future.

Exploitation of Mineral Resources

Exploitation of mineral refers to the use of mineral resources for economic growth. Exploitation of mineral resources at a mindless speed to meet the growing needs of modern civilization has resulted in many environmental problems.

Although, the exploitation of minerals began at a slow pace during the industrial revolution in Western countries, the exploitation of some minerals, especially the fossil fuels increased exponentially to meet the growing energy need. Today, about 80% of the world's energy consumption is sustained by the extraction of fossil fuels, which consists of oil, coal and gas.

Environmental Effects of extracting and using mineral resource:

Excessive exploitation of mineral resources has led to the following severe problems

- Deforestation and desertification





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- Extinction of species
- Rapid depletion of high grade minerals
- Forced migration
- Wastage of upper soil layer and vegetation
- Soil erosion and oil depletion
- Ozone depletion
- Greenhouse gas increase
- Environmental pollution
- Natural hazards, etc



Food Resources:

Food is essential for growth and development of living organisms. These essential materials are called nutrients and these nutrients are available from variety of animals and plants.

Food sources

Majority of people obtain food from cultivated plants and domesticated animals. Although some food is obtained from oceans and fresh waters, the majority of food for human population is obtained from traditional land-based agriculture of crops and livestock.

Food comes from three main sources:

Croplands (Food crops): they provide 76 % of the total food, mostly grains. Some species of crops provide food, whereas others provide commercial products like oils, fibre etc. Some of these are wheat, rice, corn, potatoes, barley, sweet potatoes, soybeans, oats, millet, sugarcane, bananas and coconuts. Many of them are used directly, whereas other can be used by changing them by using different techniques for enhancing calorific value.

Rangelands (Livestock): they provide meat mostly from grazing livestock, accounting for about 17% of the total food. Domesticated animals are an important food source. The major domesticated animals used as food source by human beings are 'ruminants' (e.g. cattle, sheep, goats, camel, reindeer, llama, etc.).

Ruminants convert indigestible woody tissue of plants (cellulose) which are earth's most abundant organic compound into digestible food products for human consumption. Milk, which is provided by milking animals, is considered to be a complete food. Other domestic animals like sheep, goat, poultry and ducks can be used as meat.

Fisheries (Aquaculture): They account for the supply of remaining 7 per cent. Fish and seafood contributes 17 million metric tonnes of high quality protein to provide balanced diet to the world.

World Food Problems

- 1) **Natural Disasters:** Climate change is having an increased impact on food production



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as droughts and floods have become more frequent and more severe. This leads to destruction of crops and related food problems.

2) **Poverty:** The main reason why most people are unable to feed themselves is not that food is unavailable but because they cannot afford it. Also, poverty reduces food output. Many African farmers produce small harvests because they lack irrigation facilities and fertilisers.

3) **Global Food Prices:** Rising global food prices affect people's ability to buy enough food to feed their families, especially the urban poor, who are compelled to spend as much as 80 percent of their income on food.

4) **Uncontrolled Population:** The balance of production and consumption of food is also a problem. If the world population grows at the current pace, the amount of food production would be highly insufficient to meet the food requirements.

5) **Foreign Companies:** Foreign companies are taking over vast areas of fertile farmland in poor countries to grow food for export, diminishing local farmers' access to land and food.

6) **Undernourishment:** It is the lack of sufficient calories in food. Undernourished children are likely to suffer from stunted growth, mental retardation, and other social and developmental disorders. In developing countries, one child in four dies of diseases due to undernourishment and suffer from deafness, anaemia, thyroid etc.

7) **Malnourishment:** It relates to the deficiency of nutrients such as proteins, vitamins or essential chemical elements in food. In poor countries, people get malnourished because they cannot afford a healthy diet like meat, fruit, milk and milk products which leads to a variety of health problem like goitre, anaemia etc.

9) **Over nutrition:** It refers to an intake of excessive calories and this problem afflicts the rich, developed countries of the world. Consumption of food in excess can lead to problems such as obesity, vitamin poisoning etc.

Impacts of Over-Grazing:

India leads in livestock population in the world. The huge population of livestock needs to be fed and the grazing lands or pasture areas are not adequate. This leads to over-grazing, the impact of which are:

1) **Soil erosion:** Due to overgrazing by cattle, the cover of vegetation almost gets removed from the land. When the grasses are removed, the soil becomes loose and susceptible to the aviation of wind and water.

2) **Land Degradation:** Over-grazing leads to multiple actions resulting in loss of soil structure, hydraulic conductivity and soil fertility as explained below:

a) The humus content of soil decreases and overgrazing leads to organically poor, dry, compacted soil.

b) Overgrazing removes the vegetal cover over the soil and the exposed soil gets compacted due to which the operate soil depth decline.

c) Due to trampling by cattle the soil loses infiltration capacity, which reduces percolation of water into the soil and more water

d) Organic recycling also declines in the ecosystem because not enough detritus or litter remains on the soil to be decomposed.

3) **Loss of useful species:** Overgrazing adversely affects the composition of plant population





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and their regeneration capacity. When the livestock graze upon them heavily, even the root stocks which carry the reserve food for regeneration get destroyed.

4) *Floods*: Soil erosion leads to floods. The soil cannot check the flow of rain water, resulting in floods.

5) *Reduction in plant diversity*: The cattle like to eat certain plants, and leave the others results of destruction of certain plant species.

Impact of Agriculture

Changes brought about by agriculture on environment can broadly be divided into three classes:

1) *Local Changes*: are also known as on-site effects which occur at or near the site of farming.

a) *Soil erosion*: wind or water action

b) *Pollution of rivers*: chemicals and fertilizers flown by wind and irrigation water

c) *Poisoning of fish*: Due to water pollution, fish eating get toxic to human.

d) *Depletion of nutrients*: During slash and burn the organic matter in soil destroyed the nutrient and taken up by crops within short period. Such cropping get destroyed and supply becomes low.

2) *Regional changes*: refers to changes in region of farming

a) *Deforestation*

b) *Desertification*

c) *Soil Infertility*

d) *High pollution*

3) *Global changes*: refers to changes in the world at large

a) *Climatic changes*: Change in Oxygen, carbon and nitrogen dioxide cycle

b) *Global warming*: Due to concentration of CO₂ which results in the increasing of temperature of earth which is very hazardous to human beings.

5. 'The science of Environment studies is a multidisciplinary science' – Explain.

Multidisciplinary nature of environmental studies:

The science of Environment studies is a multidisciplinary science because it depends on various disciplines like chemistry, physics, biology, mathematics, medicine etc. It is a field that draws upon not only core scientific areas of biology, physics and chemistry but also applies knowledge from other non-scientific studies such as economics, law and social science. Thus, the term Environmental science may imply a single subject, but the essence of environmental science is that the subject has evolved from integrated use of many disciplines in the following manner:

1) **Biological sciences** - It forms an important component of environmental studies as it is essential to acquire a knowledge of organisms living in it. The basic concepts of botany, zoology, microbiology and biotechnology are necessary for studying the different aspects of environment and their inter relationships.

2) **Physical sciences** - It helps in understanding the changes involved with the abiotic system like energy transfer, acid rain, ozone hole etc which require the knowledge of physical chemistry.

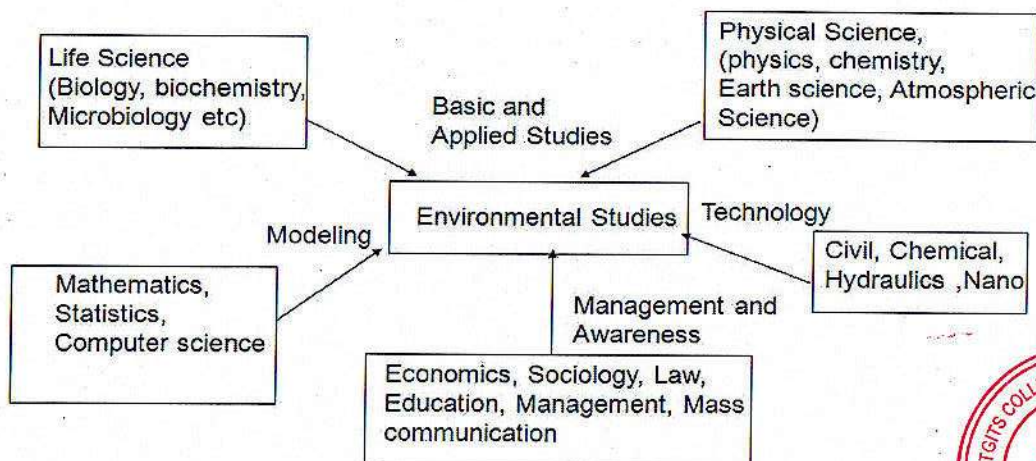




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- 3) **Atmospheric Science** - This study helps to examine the Earth's gaseous outer layer with emphasis upon its interrelation to other systems. It involves greenhouse gas effect, airborne contaminants, sound propagation phenomena related to noise pollution etc.
- 4) **Ecology** - To analyse the dynamics among an interrelated set of populations and its environment. They involve studies relating to predator interactions, environmental contamination, endangered species and analysis of proposed land development upon species viability.
- 5) **Environmental Chemistry** - To study the chemical alterations in the environment. Principal areas of study include soil contamination and water pollution, analysis of chemical degradation in the environment etc
- 6) **Geo-science** - It includes environmental geology, environmental soil science, volcanic phenomena and evolution of the earth's crust. It also covers hydrology and oceanography.
- 7) **Mathematics and Computer Science** - It helps in environmental modelling and analysis of environment related data.
- 8) **Economics, Sociology and management** - It deals with the socio-economical aspects of various components of environment.
- 9) **Law** - It helps in framing of environment related laws, Acts, rules and helps in their monitoring.
- 10) **Social Science** - It helps in dealing with population and health related issues
- 11) **Civil engineering, Chemical engineering and nanotechnology** - It provides technical solution for environmental pollution control and water treatment.
- 12) **Mass communication** - It helps in spreading environment awareness.

The multidisciplinary nature of environmental science is illustrated in following diagram



1. Air Pollution is pollution which occurs when harmful substance like gases or particles get into earth's atmosphere. It is very harmful for human. It causes disease and allergies. It is caused due to the activities of human. Air pollution also causes damage to animals and crops etc.

Causes of Air Pollution

→ Exhaust from factories and industries - One of the main reasons for causing air pollution nowadays is due to gases emitting from factories and industries. Large manufacturing companies release large amounts of carbon monoxide, organic compounds etc. into the air. This will pollute the air.

→ Burning of Fossil Fuels

Another reason for air pollution is burning of fossil fuels. When fossil fuels like coal, petroleum etc. are burned, sulphur dioxide will be emitted. This is a major pollutant which causes air pollution.

→ Agricultural activities

Agriculture products may cause air pollution. Products used in agriculture like pesticides, other chemicals will emit ammonia. This is a major pollutant also causing air pollution.

→ Mining operations

Mining is a process in which minerals are extracted from



bottom of earth. This may release ~~are~~ dust and chemicals into the atmosphere.

Effects of Air pollution

Acid Rain

Harmful gases like nitrogen oxides and sulphur oxides are released into atmosphere due to burning of fossil fuel. This will later dissolved with rain and fall back to ground in the form of acid. This is very dangerous for animals & plants.

Depletion of Ozone layer

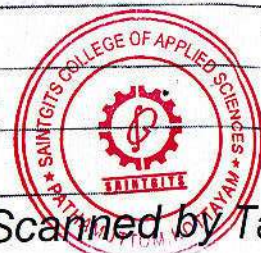
Ozone is a protective layer which protect human and other organisms from UV rays. Ozone layer is depleted due to chloro fluorocarbons in atmosphere. If Ozone layer get thin it can cause damage to human.

Respiratory and heart problems

Due to air pollution, many respiratory diseases and problems caused to humans and other organisms. Air pollution causes health diseases like cancer and heart problems to human.

Global warming

Due to increased temperatures, increase in sea levels and melting of ice lead to raising of global warming.



Q What is water pollution. What are its causes & effects?

It is the contamination of a stream, river, lake, or ocean or any other stretch of water, which cause harm for human and other organisms.

Causes of Water Pollution

Industrial waste

Manufacturing factories and other industries produce huge amount of waste which contaminate the water with chemicals and toxic components. This may be lead to change in colour, smell etc. Also it is harmful for animals in waters.

Leakage from sewer lines - Sewers are places where all wastage of household goes. If a small leakage happens. It can pollute the water. It may become a breeding ground for insects.

Animal waste - The waste produced by animals is washed away into the rivers when it rains. It get mixed with other chemicals and cause various water borne diseases like cholera, diarrhea.

Sewage and waste water - The wastage and sewage water that is produced by households is chemically treated and released into the sea with fresh water. This have harmful bacteria which causes disease to both humans and other organisms.

Effects of water pollution

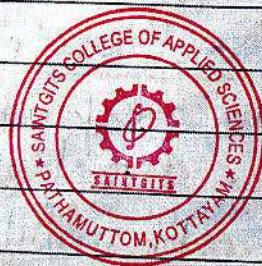
Disease- People can get diseases like hepatitis by eating seafood that is poisoned. Also cholera and other diseases are breaking in many poor countries due to poor water treatment.

Deaths of aquatic animals

Due to release of pollutants and wastage into sea water causes many diseases and cause death of sea animals. These chemicals that entered into water body inhaled by water animals, which is result of death of these animals.

Destruction of ecosystem

Ecosystem can be severely damaged by water pollution. Many areas are affected by careless human pollution.



Q. What is soil pollution. What are its causes & effects?

Soil pollution refers to anything that causes contamination of soil and degrades the soil quality. When humans introduce harmful chemicals and objects into the soil which causes harm to humans and other organisms can call as Soil pollution.

Causes of Soil Pollution

Agricultural Activities

Due to introduction of technology, chemical utilization increased to its maximum, which created fertilizers and pesticides. When this is used in farms and crops, it not only affect crops but it goes directly into soil. It can damage every living organisms in soil. Or when it rains, this chemicals mixed with water and cause water pollution.

Acid Rain

Acid Rain is caused when harmful substance mixes with rain and fall back on the ground. This may fall on soil and dissolve some nutrients in soil and change the structure of soil.

Waste disposal

Every waste we ~~use~~ produce ~~and~~ cause soil pollution. Industrial waste is an important cause. But humans ~~to~~ himself produce certain amount of waste which is entered in the sewer system which dissolves with other ~~to~~ wastes can cause damage to soil & water.



Industrial Activity

Due to the technological upgradation and industrial manufacturing, soil can be unusable for other purposes. Due to mining activities many industries focus on mining. This also damage the soil.

Effects of Soil Pollution

1. Effect on Health of Humans

Soil is an important factor for human sustainability. Crops and plants are growing with the help of human soil. ~~This~~ When this soil get polluted, it can pollute crops. Which in turn pollute human beings. Also causes various health problems.

2. Decreased Soil fertility

The toxic chemicals present in soil can decrease soil fertility and therefore decrease in the soil yield. The contaminated soil is then used to produce fruits and vegetables which lacks quality nutrients.

3. Changes in Soil structure

Soil will be altered due to death of soil organisms. But it also force predators to move to other places in search of food.



ROLE OF AN INDIVIDUAL IN PREVENTION OF POLLUTION

Introduction

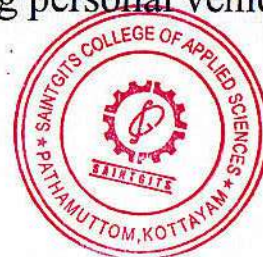
Pollution is a man-made disease that can be cured only by man and remedies adopted by them. Man's quest for advancement has entered in a competition of industrialization and information technologies.

Incomplete and inefficient technology coupled with increased population is the main cause of man-made pollution.

E. P. Odum (1971) defined pollution as "an undesirable change in the physical, chemical and biological characteristics of air, water and soil which affects human life". Today, the problem of pollution has become a major challenge to scientists, environmentalists and humanists. The pollution of various components has undergone to such an extent that we are unable to breathe fresh air, drink pure water and get healthy food. If man has to survive, he has to fight and overcome this gigantic problem before it overcome him and wipes out his existence. So it is very essential to reduce and the spread of pollution. Each and every individual should be aware on his role in the prevention of pollution.

Ways in Which a Individual can Help in Prevention of Pollution

- Individual should minimize wastage of resources such as electricity. Every unit of electricity saved is equivalent unit of electricity produced as it not only saves the fuel that would be used to produce that electricity, but also help to prevent pollution that is accompanied by burning of that fuel. Therefore, person should always switch off appliances when not in use.
- Individuals should prefer walking or use cycles instead of using motor vehicles, especially when distances to be travelled are small.
- Individuals can make considerable contribution by using mass transport (buses, trains, etc) instead of using personal vehicles.



- When going to workplace, colleagues from nearby localities should pool vehicles instead of going in individual personal vehicles.
- Taking personal vehicles for periodic pollution checks at centres approved by authorities.
- Individuals should reuse items whenever possible.
- Products that are made of recycled material should be given preference.
- Use gunny bags made of jute instead of plastic bags.
- Take part in environment conservation drives such as tree planting drives.
- Use water resources efficiently.
- Use renewable resources by installing equipment such as solar heaters and using solar cookers.
- Dispose potentially harmful products such as cells, batteries, pesticide containers, etc properly.
- Use of refrigerators should be minimised wherever possible as they are main source of CFC, which is responsible for Ozone layer depletion.
- Follow and promote family planning, as more population means more resources utilized and more resources utilized imply more pollution.
- Avoid making noise producing activities such as listening to loud music.
- Use handkerchiefs instead of paper tissues.
- Organize drives to clean streets and clean drains with help of other people of locality.
- Spread awareness and inspire other people to prevent pollution. Individuals should be encouraged to acquire information and innovations from world over and implement them locally.



CONCLUSION

Pollution is a man made problem created as a result of irresponsible over exploitation of nature. Only man can minimize pollution by preventing its increase and spread. If man has to survive he has to overcome this gigantic problem. Though global efforts are being made, the responsibility of an individual is

equally significant. The individuals of developed countries behave with care and precautions but those of developing and undeveloped countries are lagging behind. It is very essential to aware people on their role in the prevention of pollution then only we can reduce and control pollution.

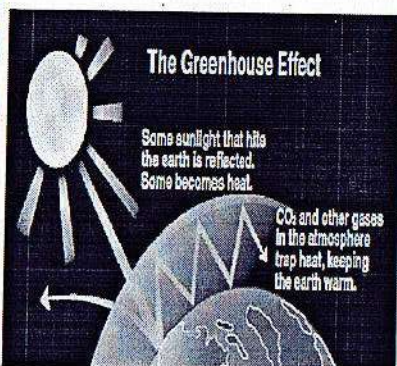
It is our duty to protect our environment from pollution. An individual can adopt several preventive measures to reduce pollution. Individuals can contribute several indirect roles to minimize pollution. Several Indians have shown exemplary contribution towards developing pollution free environment & bringing social prosperity. Anna Hazare, Rajendra Singh, S.L. Bahuguna are such icons.



What is Greenhouse Effect?

- The word greenhouse effect holds two meanings
- One is the natural greenhouse effect that one that keeps our Earths climate normal and comfortable
- On the other hand there is a man made greenhouse effect which is an enhancement of natural greenhouse
- made from burning fossil fuels ,petroleum, coal, and natural gas.

Natural Greenhouse Effect



- Natural greenhouse effect is made from the heat energy radiated from the sun
- Greenhouse gases are naturally from the presence in the atmosphere.
- Sunlight goes through the atmosphere warming earth in a cycle
- The cycle continues through the atmosphere as the gases absorb energy at the same time while the leftovers go to space.



Man-made Effects



- Activities man by humans result in production of greenhouse gases
- While the amounts of gases increase in the atmosphere the stability of the greenhouse gases change causing effects on the whole world
- Greenhouse effects caused by burning , fossil fuels coal, oil, natural gases, cutting and burning trees producing carbon dioxide
- Greenhouse gases trap heat making earth harmer and creating global



What Causes Green House Effects?

- One of the main causes of Global Warming is the Green house effect. When the production of infrared energy in the atmosphere warms a planet's surface, it is known as the Green House Effect. The Greenhouse effect is a natural cause that is happening on our planet. The natural causes of the Green house effect are the releasing of gases like nitrous oxide, carbon-dioxide, methane, ozone and water vapour. Carbon-dioxide itself is guilty for the Green house effect.
- One of the man-made causes of the Green House effect is erosion. Deforestation increases the amount of

...

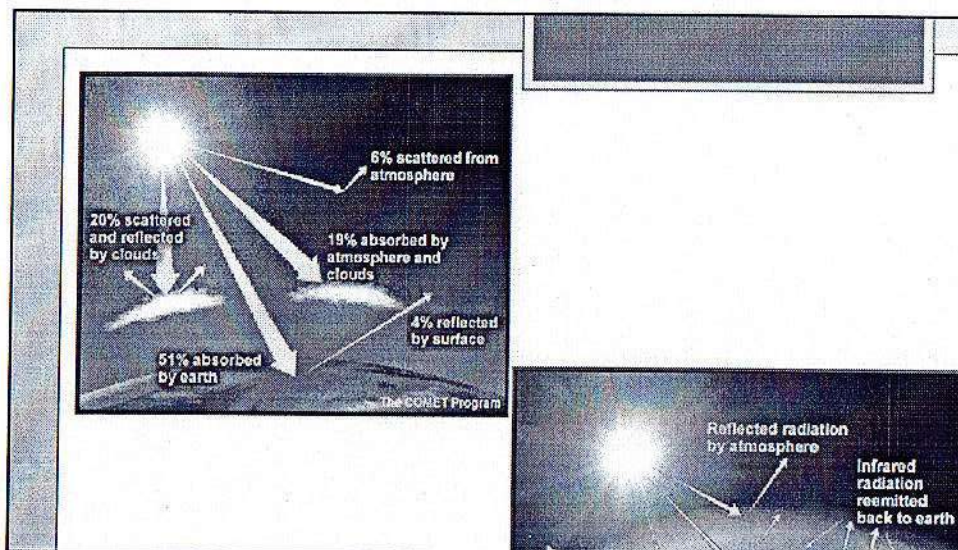
- Greenhouse Gases also can be released into the atmosphere due to the burning of fossil fuels, oil, coal and gas. These materials are used more and more and violently in Industries. Therefore Industries are also a major cause of the Greenhouse Effect.
- Other man-made causes of the increase in the Greenhouse effect due to the emission of such gases are any all electrical appliances. Even the poor refrigerator in the house emits gases which contribute to the Greenhouse effect. These gases are known as Chlorofluorocarbons (CFCs) and are used in refrigerators, aerosol cans, and some foaming agents in the packaging industry, fire extinguisher chemicals and cleaners used in the electronic industry.
- Other man-made processes that contribute and are a



How does the GHE work?

- The greenhouse effect works like an actual greenhouse, a place to keep growing plants nice and warm.
- This is the same process that keeps the Earth and the life on Earth nice and warm.
- Visible light enters the top of the Earth's atmosphere, some of it is scattered by air molecules and most of it is reflected back into space.
- When the sun's rays hit the Earth, 70 % of the energy stays on the planet, absorbed by land, oceans, plants and other things and the other 30% reflects back into outer space by clouds.

- • •
- This process keeps the Earth in radiative equilibrium; the sun's rays continuously hitting the Earth warming it, and then the warm Earth sends back the radiation back into space cooling itself.
- Some of that released radiation makes it into space, and the rest of it ends up getting reflected back down to Earth when it hits certain things in the atmosphere, such as carbon dioxide, methane gas and water vapor -- the greenhouse effect. The heat that doesn't make it out through Earth's atmosphere keeps the planet warmer than it is in outer space, because more energy is coming in through the atmosphere than is going out. This is



Greenhouse Gases

- Greenhouse gas is any gas that accumulates lower-energy infrared radiation. These gases consist of:
 - water vapour
 - carbon dioxide
 - methane



Water Vapour

- Produced by the Sun's heat emissions
- Makes up a maximum of 4% of the air
- Causes about two-thirds of the greenhouse effect
- Higher temperature = more water vapour

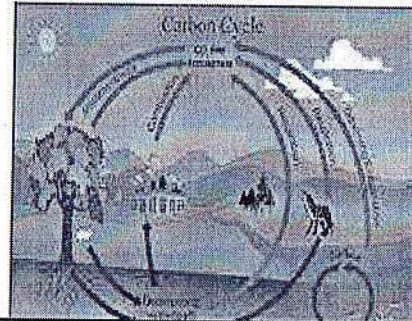
The Cycle of Water Vapor

A look at how water vapor acts as a greenhouse gas



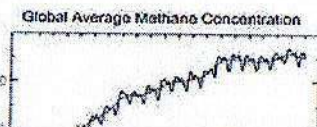
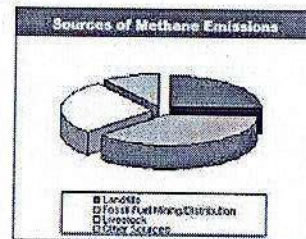
Carbon Dioxide

- Both man-made and naturally produced
- Accounts for 385 ppm of the atmosphere
- Responsible for about a 25% of the natural greenhouse effect on Earth



Methane

- Produced both by human sources and naturally
- Less quantities of methane in the atmosphere than carbon dioxide
- Methane molecules are more capable of absorbing thermal energy



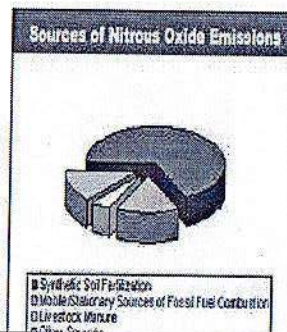
Ozone

- Exists naturally
- Creates the layer protecting the Earth from the Sun's high-energy UV radiation rays
- Acts as a greenhouse gas in the troposphere



Nitrous Oxide

- Produced naturally and by human sources
- Lower density in atmosphere than carbon dioxide
- Molecules 300 times more effective as a greenhouse gas than





Effects On Sea Levels

- Rising temperatures cause water of the oceans along with the sea to increase
- Increasing temperatures melt ice as it starts to flow into the seas of Antarctic and Greenland.
- sea levels rise by 20-40 cm causing floods in areas with low coast areas e.g. Bangladesh and Netherland



Effects on Farming




- changes in the weather affect the growing crops around the world
- Crops of wheat and rice grow well in high temperatures
- sugarcane and maize don't survive in high temperature and end up dying
- Furthermore change in the amount of rainfall affect the growth leading to shortage of food



Effects on Water

Effects on Weather

- Countries all over the world will be affected
- Britain and Southeast will have a risk of droughts
- Africa won't have enough water.
- Increasing in Greenhouse gases will change weather around the world
- North-western countries have an increase of temperature
- Summers and winters much hotter
- Some places will become hotter and wetter while some will be dry and cooler
- The world will change with droughts.



Effects on People and Animals



- Changes make it hard for humans to adjust and adapt to climate
- Avoiding all the disasters moving from one place to another will be hard
- while weather and temperature changes, the homes of plants and animals will be affected
- Moving ocean animals like seals will be hard
- New homes for animals may not be safe causing loss in animal population

How to prevent man-made greenhouse effects.

- Wasteful buying
 - If you don't need or truly want something, don't buy it. It's going to end up in the garbage.
- Turn off the lights when you leave the room.
- Don't leave your television on while you go to sleep. Only turn on water when you need it. For example, turn it off while you are putting toothpaste on the toothbrush. Turn it back on when you need it.
- Reduce, reuse and recycle.
- Reduce the things that you need. Reuse items that you have until they are no longer any good. Recycle all that is



- Choose natural gas over coal and oil every chance you get.
 - For example ; when barbecuing.
- Get a hybrid or an electric car when shopping for that new car.
 - If this isn't possible, choose a small car that gets good gas mileage.
- Form an environmental club in your high school, college or community.
- Walk to places or get there by bike.



Work Citations

- Layton, Julia, and Ed Grabianowski. "HowStuffWorks "Trapping Heat" *Howstuffworks "Science"* 10 Jan. 2011 <<http://science.howstuffworks.com/environmental/green-science/question7461.htm>>.
- "What is the Greenhouse Effect?" *Weather Questions and Answers*. Web. 8 Jan. 2011. <http://www.weatherquestions.com/What_is_the_greenhouse_effect.htm>.
- D'Silva, Roy. "Causes of the Greenhouse Effect." *Buzzle Web Portal: Intelligent Life on the Web*. Web. 7 Jan. 2011. <<http://www.buzzle.com/articles/causes-greenhouse-effect.html>>.
- "The Greenhouse Effect's Impact." *How to Prevent Global Warming: An Easy Way to Reduce Your Impact*. Web. 8 Jan. 2011. <<http://www.acoolerclimate.com/the-greenhouse-effects-impact/>>.
- "The Greenhouse Effect." *Test Page for Apache Installation*. Web. 8 Jan. 2011. <<http://hyperphysics.phy-astr.gsu.edu/hbase/thermo/grnhse.html>>.
- Sharon. "10 Ways to Reduce Greenhouse Gases." Web log post. *Town of East Gwillimbury*. Web. <http://www.eastgwillimbury.ca/Environment/10_Ways_to_Reduce_Greenhouse_Gases.htm>.



Assignment/Seminar Marks



Programme: B.Com Taxation
Faculty: Preetha Thomas (PT)

Semester : V

Subject with Code: CO5CRT15

Environment Management and Human f

Roll No	Register No	Name	Assignment/Seminar					Average
			1	2	3	4	5	
		Course Outcome	CO 1	CO 2	CO 3	CO 4	CO 5	
			Maximum Marks					
5	5	5	5	5				
1	180021066791	AARATHI M BALAKRISHNAN	5.00	5.00	5.00	5.00	5.00	5.00
2	180021066792	AAVANI V R	5.00	5.00	5.00	5.00	5.00	5.00
3	180021066793	ABHIRAM S	5.00	5.00	5.00	5.00	5.00	5.00
4	180021066794	ABHIRAMI VIJAYAN	5.00	5.00	5.00	5.00	5.00	5.00
5	180021066795	ADARSH T SABU	5.00	5.00	5.00	5.00	5.00	5.00
6	180021066796	AHNA RAICHEL VARGHESE	5.00	5.00	5.00	5.00	5.00	5.00
7	180021066797	AJO ALEX	5.00	5.00	5.00	5.00	5.00	5.00
8	180021066798	AKASH DEEPU	5.00	5.00	5.00	5.00	5.00	5.00
9	180021066799	AKHIL VATHUPARAMPIL JACOB	4.00	4.00	4.00	4.00	4.00	4.00
10	180021066800	AKSHAYMON SAMUEL	3.00	3.00	3.00	3.00	3.00	3.00
11	180021066801	ALBIN ABRAHAM	5.00	5.00	5.00	5.00	5.00	5.00
12	180021066802	ANAN GEORGE KOSHY	5.00	5.00	5.00	5.00	5.00	5.00
13	180021066803	ANEETA SUSAN GEORGE	5.00	5.00	5.00	5.00	5.00	5.00
14	180021066804	ANIL GAYATHRI	5.00	5.00	5.00	5.00	5.00	5.00
15	180021066805	ANU M	5.00	5.00	5.00	5.00	5.00	5.00
16	180021066806	ANURAG A K	4.00	4.00	4.00	4.00	4.00	4.00
17	180021066807	ARAVIND RAJAGOPAL	5.00	5.00	5.00	5.00	5.00	5.00
18	180021066808	AROMAL RAVEENDRAN	5.00	5.00	5.00	5.00	5.00	5.00
19	180021066809	ASHLY SARA KOSHY	5.00	5.00	5.00	5.00	5.00	5.00
20	180021066810	ASWIN P KUMAR	5.00	5.00	5.00	5.00	5.00	5.00
21	180021066811	ATHIRA MOHAN	3.00	3.00	3.00	3.00	3.00	3.00
22	180021066812	BALAKRISHNAN J	4.00	4.00	4.00	4.00	4.00	4.00
23	180021066813	CHRISTEENA MARIA GEORGE	5.00	5.00	5.00	5.00	5.00	5.00
24	180021066814	EBIN JOY	5.00	5.00	5.00	5.00	5.00	5.00
25	180021066815	EMIL GEORGE EAPEN	5.00	5.00	5.00	5.00	5.00	5.00
26	180021066816	JACOB KEVIN MATHEW	5.00	5.00	5.00	5.00	5.00	5.00
27	180021066817	JAKE RONEY	5.00	5.00	5.00	5.00	5.00	5.00
28	180021066818	JELITA ELIZABETH MATHEW	5.00	5.00	5.00	5.00	5.00	5.00
29	180021066819	JOHAN GEORGE SEN	5.00	5.00	5.00	5.00	5.00	5.00
30	180021066820	JYOTHI KRISHNA	5.00	5.00	5.00	5.00	5.00	5.00
31	180021066821	K AMAL AJI	3.00	3.00	3.00	3.00	3.00	3.00
32	180021066822	K PHILIP THOMAS	5.00	5.00	5.00	5.00	5.00	5.00
33	180021066823	LIBIN VARKEY KURIAKOSE	3.00	3.00	3.00	3.00	3.00	3.00
34	180021066824	MARION OOMMEN	5.00	5.00	5.00	5.00	5.00	5.00
35	180021066825	MEENU E.M	5.00	5.00	5.00	5.00	5.00	5.00
36	180021066826	MIDHUN V THOMAS	5.00	5.00	5.00	5.00	5.00	5.00

37	180021066827	MILIE HASEEB	4.00	4.00	4.00	4.00	4.00	4.00
38	180021066828	NEHA ANN JOSEPH	5.00	5.00	5.00	5.00	5.00	5.00
39	180021066829	NEVIL VARGHESE ABRAHAM	5.00	5.00	5.00	5.00	5.00	5.00
40	180021066830	NIDHIN RAJ	5.00	5.00	5.00	5.00	5.00	5.00
41	180021066831	PAVITHRA N	5.00	5.00	5.00	5.00	5.00	5.00
42	180021066832	PRIYANKA ANNA LESLIE	5.00	5.00	5.00	5.00	5.00	5.00
43	180021066833	REN P THOMAS	5.00	5.00	5.00	5.00	5.00	5.00
44	180021066834	RIYA ELSA PHILIPS	4.00	4.00	4.00	4.00	4.00	4.00
45	180021066835	SAIN KARINGATTIL PRADEEP	4.00	4.00	4.00	4.00	4.00	4.00
46	180021066836	SANDRA ACHU THOMAS	5.00	5.00	5.00	5.00	5.00	5.00
47	180021066837	SANDRA NINAN	5.00	5.00	5.00	5.00	5.00	5.00
48	180021066838	SANDRA SUSAN JOHN	5.00	5.00	5.00	5.00	5.00	5.00
49	180021066839	SHAROOKE F SHAJI	5.00	5.00	5.00	5.00	5.00	5.00
50	180021066840	SNEHA SARA MATHEW	4.00	4.00	4.00	4.00	4.00	4.00
51	180021066841	SNEHA THOMAS	5.00	5.00	5.00	5.00	5.00	5.00
52	180021066842	SREYA RAJESH	4.00	4.00	4.00	4.00	4.00	4.00
53	180021066843	STACY ELSA JOHN	5.00	5.00	5.00	5.00	5.00	5.00
54	180021066844	STENIMOL ELSA ABRAHAM	5.00	5.00	5.00	5.00	5.00	5.00
55	180021066845	TIBIN THOMAS	5.00	5.00	5.00	5.00	5.00	5.00
56	180021066846	VAISHAKH BABU	3.00	3.00	3.00	3.00	3.00	3.00
57	180021066847	VISHNURAJ B	5.00	5.00	5.00	5.00	5.00	5.00





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MODEL EXAMINATION, JAN 2021

PG Department of Commerce, Semester V

ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS

Total : 80 marks

Time: 3 hours

Section A

Answer any 10 questions. Each question carries 2 marks.

1. What is Environment?
2. What is UDHR?
3. Identify Renewable resources.
4. List out Human Rights.
5. What is a food chain?
6. Summarize biodiversity and its types.
7. Explain carbon exchange.
8. Explain rain water harvesting.
9. What is Green Banking?
10. Explain rainwater harvesting.
11. Define e-waste
12. Define Public Authority



(10 x 2 = 20 Marks)

Section B

Answer any 6 questions. Each question carries 5 marks.

13. Name the different types of natural resources?
14. Examine the advantages of Green Marketing.
15. Explain how RTI Act serves customers of banks.
16. Outline thermal pollution and its causes and effects?
17. Analyze the positive and negative impacts of ecotourism.
18. Explain the United Nations declaration for women.
19. Explain the Scope and Importance of Environmental Studies.
20. What are the objectives of Right to Information Act?

21. What are the local environment issues?

(6 × 5 = 30 Marks)

Section C

Answer any 2 questions. It carries 15 marks.

22. Discuss the Role of UN in promoting and protecting human rights.

23. Explain the advantages and limitations of Green Accounting.

24. Explain the salient features of RTI Act.

25. Summarize the role of individuals in prevention of pollution.

(2 × 15 = 30 Marks)



[Scan QR code for Answer Key]



**SAINTGITS COLLEGE OF APPLIED SCIENCES
PATHAMUTTOM, KOTTAYAM**

SAINTGITS
LEARN.GROW.EXCEL

MODEL EXAMINATION, JAN 2021

Department of Commerce, Semester V

ENVIRONMENT MANAGEMENT AND HUMAN RIGHTS

Total : 80 marks

Time: 3 hours

Section A

Answer any 10 questions. Each question carries 2 marks.

1. What is Environment?!

The environment can be defined as a sum total of all the living and non-living elements and their effects which influence human life. While all living or biotic elements are animals, plants, forests, fisheries, and birds, etc. The non-living or abiotic elements include water, land, sunlight, rocks, and air, etc.

2. What is UDHR?5

The Universal Declaration of Human Rights (UDHR) is a milestone document in the history of human rights. Drafted by representatives with different legal and cultural backgrounds from all regions of the world, the Declaration was proclaimed by the United Nations General Assembly in Paris on 10 December 1948.

3. Identify Renewable resources!

Solar energy.

Wind energy.

Hydro energy.

Tidal energy.

Geothermal energy.

Biomass energy.

4. List out the three generations of Human Rights.5

The so-called "**Three Generations Theory of Human Rights**"—known for dividing **human rights** into **three** separate **generations** based on (1) **civil** and political **rights**; (2) economic, social and cultural **rights**; and (3) collective or solidarity **rights**—turns 40 this month.

5. What is a food chain?!

A food chain is a linear network of links in a food web starting from producer organisms (such as grass or trees which use radiation from the Sun to make their food) and ending at apex predator species (like grizzly bears or killer whales), detritivores (like earthworms or woodlice), or decomposer species.



6. Summarize biodiversity and its types.2

Biodiversity describes the richness and variety of life on earth. It is the most complex and important feature of our planet. Without biodiversity, life would not sustain.

Types of Biodiversity

There are the following three different types of biodiversity:

- Genetic Biodiversity
- Species Biodiversity
- Ecological Biodiversit



7. Explain carbon exchange. 3

Under Carbon trading, a country or a polluter having more emissions of carbon is able to purchase the right to emit more and the country or entity having fewer emissions sells the right to emit carbon to other countries or entities. The countries or polluting entities emitting more carbon thereby satisfy their carbon emission requirements, and the trading market results in the most cost-effective carbon reduction methods being exploited first.

8. Explain watershed management. 2

Watershed management is a term used to describe the process of implementing land use practices and **water management** practices to protect and improve the quality of the **water** and other natural resources within a **watershed** by **managing** the use of those land and **water** resources in a comprehensive manner.

9. What is Green Banking?3

Green banking means promoting environmental friendly practices and reducing your carbon footprints from your **banking** activities. **Green banking** aims at improving the operations and technology along with making the clients habits environment friendly in the **banking** business.

10. Explain rainwater harvesting.2

Rainwater harvesting is the simple process or technology used to conserve Rainwater by collecting, storing, conveying and purifying of Rainwater that runs off from rooftops, parks, roads, open grounds, etc. for later use.

Rainwater harvesting systems consists of the following components:

- Catchment- Used to collect and store the captured Rainwater.
- Conveyance system – It is used to transport the harvested water from the catchment to the recharge zone.



- Flush- It is used to flush out the first spell of rain.
- Filter – Used for filtering the collected Rainwater and remove pollutants.
- Tanks and the recharge structures: Used to store the filtered water which is ready to use.

The process of rainwater harvesting involves the collection and the storage of rainwater with the help of artificially designed systems that run off naturally or man-made catchment areas like- the rooftop, compounds, rock surface, hill slopes, artificially repaired impervious or semi-pervious land surface.

11. Define e-waste³

E-waste is a popular, informal name for electronic products nearing the end of their "useful life." Computers, televisions, VCRs, stereos, copiers, and fax machines are common electronic products. Many of these products can be reused, refurbished, or recycled.

The term "e-waste" is loosely applied to consumer and business electronic equipment that is near or at the end of its useful life. There is no clear definition for e-waste; for instance whether or not items like microwave ovens and other similar "appliances" should be grouped into the category has not been established.

12. Define Public Authority.⁴

As defined in the Act, a " **Public authority** " is any **authority** or body or institution of self government established or constituted by or under the Constitution; or by any other law made by the Parliament or a State Legislature; or by notification issued or order made by the Central Government or a State Government.

(10 × 2 = 20 Marks)

Section B

Answer any 6 questions. Each question carries 5 marks.

13. Name the different types of natural resources? 1

Ever since the earth was inhabited, humans and other life forms have depended on things that exist freely in nature to survive. These things include water (seas and freshwater), land, soils, rocks, forests (vegetation), animals (including fish), fossil fuels, and minerals. They are called Natural Resources and are the basis of life on earth. Natural resources fall under two main categories: Renewable and Non-renewable Resources.

Renewable resources

Renewable resources are those that are regularly available (like water) or can be reasonably replaced or recovered, like vegetative lands. Animals are also renewable because, with a bit of care, they can reproduce offsprings to replace adult animals. Even though some non-renewable resources can be replenished, they may take many years, and that does not make

them renewable.

Renewable resources that come from living things such as trees and animals can be called organic renewable resources.

Renewable resources that come from non-living things such as water, sun, and wind can be called inorganic renewable resources.

Non-renewable resources

Non-renewable resources are those that cannot be replaced once they are destroyed. Examples include fossil fuels. Minerals are also non-renewable because even though they form naturally in a process called the rock cycle, it can take thousands of years, making it non-renewable. Some animals can be considered non-renewable because if people hunt for a particular species without ensuring their reproduction, they will be extinct. That is why we must ensure that we protect resources that remain endangered.

Non-renewable resources can be called inorganic resources if they come from non-living things. Examples include minerals, wind, land, soil, and rocks.

Some non-renewable resources come from living things — such as fossil fuels. They can be called organic non-renewable resources.

14. Examine the advantages of Green Marketing.3

Being green or sustainable encompasses many elements; energy efficiency, the use of clean/renewable energy, water conservation, recycling and waste management, eco-friendly apparel, organic produce, sustainable farming and much more. The key to a successful green marketing strategy is to communicate authentic and concrete facts about a company's engagement toward social and environmental causes.

A company can enter new markets when it brings attention to positive environmental impact

When a business shines light on the positive impacts their product or service brings about they have the possibility of piercing new target markets. For example, residents that never considered the idea of using solar power might switch to solar panels if the information is clear, concise and targets their needs.

Gain more profit from green marketing

They are willing to pay more for products and services seen as sustainable or with a positive social impact. Customers are reassured when their products are chemical-free and made with recyclable materials that do not harm the environment.

Green marketing brings a competitive advantage



When you choose green marketing, you become seen as a conscious or responsible leader in your industry. This is true even for customers that do not prioritize environmental issues.

Raise awareness on important environmental or social issues

If a company supports any causes, partnering with fellow environmental leaders can be part of its green marketing strategy. This can bring huge momentum to a campaign, an event, a training workshop and more.

15. Explain how RTI Act serves customers of banks4

The **law applies** to only public sector **banks** and puts constraints on their ability to undertake **banking** business in competition with the other commercial **banks**. It is also necessary to exempt PSBs from the **applicability** of the **RTI Act** at least to preserve the obligation of secrecy in regards to affairs of customers.

16. Outline thermal pollution and its causes and effects?2

Thermal pollution, sometimes called "**thermal enrichment**," is the degradation of **water** quality by any process that changes ambient **water** temperature. A common **cause** of **thermal pollution** is the use of **water** as a coolant by power plants and industrial manufacturers.

Many human and natural factors contribute to the problem of thermal pollution. The single biggest cause of thermal pollution is probably cooling for industrial machinery and power plants. Water is an excellent, and free, cooling agent. This is why many industrial operations pull in relatively cool water to cool their machinery and let the relatively warm water flow back into the river or lake or sea. **The Effects of Thermal Pollution:**

The effects of thermal pollution are diverse, but in short, thermal pollution damages water ecosystems and reduces animal populations. Plant species, algae, bacteria, and multi-celled animals all respond differently to significant temperature changes. Organisms that cannot adapt can die of various causes or can be forced out of the area. Reproductive problems can further reduce the diversity of life in the polluted area. However, thermal pollution can be beneficial to some species. Bacteria and algae tend to benefit from the excess heat. Some larger animals also benefit from the warmer water. In Florida, manatees spend the winter near power plants, where the cooling water they use warms up the shallow salt water. On balance, thermal pollution is a negative force for many reasons.

****Decreased Dissolved Oxygen: ****

Warm water holds less oxygen than cool water. If the oxygen level drops animals that cannot move to another area may begin to die. In deeper bodies of water, the injection of warm water can keep oxygen from dispersing into deep water, which is potentially good for bacteria but dangerous for aquatic animals. The decreased oxygen can cause algae blooms that pose a threat to aquatic plants and animals. This algae bloom problem is probably the



most common and best-known side effect of thermal pollution.

Migration:

Fish and amphibians may move away from the warm water to a more-suitable location, disrupting the ecosystem for animals that remain. Birds may also be forced to leave in search of areas with more food. Plants and certain animals will be stuck in the area, which can lead to huge losses.

Increased Toxins:

Toxins in the water are more a side effect of dumping waste water than a direct effect of thermal pollution. Chemical pollution is an almost inevitable side effect of using water for cooling. Solvents, fuel oil, and dissolved heavy metals end up in the lake or river where the cooling water gets dumped. Nuclear power plants can also release slightly radioactive cooling water. The chemicals may have a range of toxic effects on plants and animals, from fatal poisoning to mutations and sterilization.

Loss of Biodiversity:

The sudden heating can kill off vulnerable organisms or drive them away. This is one of many serious issues for threatened and endangered animal species. This loss can come from organisms dying from the hot water, being unable to reproduce as effectively as before, or simply leaving the area. We usually think of animals as casualties of water pollution, but multi-celled aquatic plants are also at risk when thermal pollution changes the local aquatic ecosystem.

Ecological Impacts:

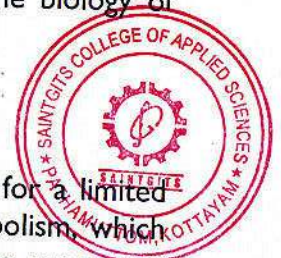
The local aquatic ecosystem can be damaged by thermal pollution, especially if it is dramatic, as in copious amounts of warm water being dumped into a chilly pond or bay or river. "Thermal shock" can kill off insects, fish, and amphibians. This sudden loss of life causes further issues with the ecosystem.

Reproductive Effects:

A significant temperature increase in the water can cause reproductive problems. Warmer water can reduce the fertility of some organisms. Other species may suffer birth defects or lay deformed eggs because of chemical changes in the body caused by warmer water. Defective eggs and birth defects hurt the overall reproductive fitness of the animal population and can reduce the population. Thermal pollution can change the biology of aquatic organisms in a variety of ways.

Increased Metabolic Rate:

Warmer water may be good for cold-blooded fish and amphibians, but only for a limited time. One of many real problems that warm water may cause is faster metabolism, which means animals need more food. The local ecosystem may not be able to support a significant increase in food consumption. Worse still, the warmer water gives an advantage to certain organisms while it puts stress on others. The more-adaptable organisms may unbalance the ecosystem simply by out-competing other organisms and by eating them or



driving them to starvation.

17. Analyze the positive and negative impacts of ecotourism.3

Positive

It act as a deterrent to poaching as a steady flow of tourists hampers and provides no scope for collusion between forest officials and poachers.

Create an interest and awareness among the people about flora and fauna.

Negative

Mismanagement of eco tourism sites causes more harm.

Eco tourism takes away livelihoods from the locals.

18. Explain the United Nations declaration for women.5

The persistent and increasing burden of poverty on women

Inequalities and inadequacies in and unequal access to healthcare

Inequalities and inadequacies in and unequal access to education

Inequality between men and women.

Lack of respect for and inadequate promotion.

19. Explain the Scope and Importance of Environmental Studies.1

Environmental Science

Environmental Engineering

Environmental Management

19. What are the objectives of Right to Information Act?4

To promote transparency and accountability in the functioning of the government.

To set up a practical regime for giving citizens access to information that is under the control of public authorities.

21. What are the local environment issues?2

Earthquake

Land slides

Climate change



(6 x 5 = 30 Marks)

Section C

Answer any 2 questions. It carries 15 marks.

22. Discuss the Role of UN in promoting and protecting human rights.5

Human rights are a set of principles concerned with equality and fairness. They recognise our freedom to make choices about our lives and to develop our potential as human beings.

- High Commissioner for Human Rights
- Human Right Council
- Human Right Treaty Bodies
- Special Procedures
- ILO
- UNICEF
- UNIFEM
- UNESCO
- WHO



23. Explain the advantages and limitations of Green Accounting.3

Advantages of Green Accounting

- Pollution control
- Sustainable Development
- Environmental centered management
- Use of resources wisely
- Administration from point of view of environment
- Competition among firms to portray a better image

Disadvantages of Green Accounting

- Does not include comprehensive nature
- Data needed for accounting are not available in the format
- Ignores the flows and transformations within the natural resources

24. Explain the salient features of RTI Act.4

Salient features of RTI

- All citizens possess the right to information.
- Information can be obtained within 30 days from the date of request in normal case. If information is a matter of life or liberty of a person, it can be obtained within 48 hours from time of request.
- Every public authority is under obligation to provide information on written request or request by electronic means.
- Certain information are prohibited (Section 8).
- Restrictions made for third party information.
- Appeal against the decision of the Central Information Commission or State Information Commission can be made to an officer who is senior in rank.

25. Summarize the role of individuals in prevention of pollution.2

Ways in Which a Individual can Help in Prevention of Pollution

- Individuals should minimize wastage of resources such as electricity. Every unit of electricity saved is equivalent unit of electricity produced as it not only saves the fuel that would be used to produce that electricity, but also help to prevent pollution that is accompanied by burning of that fuel. Therefore, person should always switch off appliances when not in use.
- Individuals should prefer walking or use cycles instead of using motor vehicles, especially when distances to be travelled are small.
- Individuals can make considerable contribution by using mass transport (buses, trains, etc) instead of using personal vehicles.
- When going to workplace, colleagues from nearby localities should pool vehicles instead of going in individual personal vehicles.
- Taking personal vehicles for periodic pollution checks at centres approved by authorities.
- Individuals should reuse items whenever possible.
- Products that are made of recycled material should be given preference.
- Use gunny bags made of jute instead of plastic bags.
- Take part in environment conservation drives such as tree planting drives.
- Use water resources efficiently.
- Use renewable resources by installing equipment such as solar heaters and using solar cookers.
- Dispose potentially harmful products such as cells, batteries, pesticide containers, etc properly.
- Use of refrigerators should be minimised wherever possible as they are main source of CFC, which is responsible for Ozone layer depletion.
- Follow and promote family planning, as more population means more resources utilized and more resources utilized imply more pollution.
- Avoid making noise producing activities such as listening to loud music.
- Use handkerchiefs instead of paper tissues.
- Organize drives to clean streets and clean drains with help of other people of locality.
- Spread awareness and inspire other people to prevent pollution. Individuals should be encouraged to acquire information and innovations from world over and implement them locally.

▪ (2 x 15 = 30 Marks)





SAINTGITS COLLEGE OF APPLIED SCIENCES

ANSWER BOOK FOR UG PROGRAMME



Degree: B.COM Semester: 5
 Stream: TAXATION Examination: 1st INTERNALS 20 20-21
 Course Code: Course Title ENVIRONMENT MANAGEMENT & HUMAN RIGHTS
 Total No. of Pages written 31

	Qn. No.	Mark
Section A Answer (Any 10)	1	2
	2	2
	3	2
	4	2
	5	2
	6	2
	7	2
	8	2
	9	2
	10	2
	11	
	12	2
Section B (Any 6)	13	4
	14	All
	15	
	16	
	17	All
	18	
	19	All
	20	4
	21	4
Section C (Any 2)	22	
	23	
	24	13
	25	13

Total Marks 72

Instructions to Candidates:

- Write all informations required in the front, page of the answer book.
- Write in black or in blue ink.
- DO NOT WRITE YOUR NAME OR REGISTER NUMBER IN ANY PART OF THE ANSWER BOOK EXCEPT IN THE SPACE PROVIDED FOR IT IN THE FRONT PAGE.
- Do not bring in any manuscript or any loose sheets of paper other than your Hall Ticket into the Examination Hall.
- Do not resort to copying from your neighbour or from any other source.
- Do your rough work on the right hand side against each answer and mark it off from the answer.
- Do not walk in the Examination hall, but stand up to draw the attention of the invigilator for anything you may need.
- Use of calculators is allowed only for those subjects which University permits from time to time.
- Do not take answer book outside the Examiantion Hall.
- Do not leave the Examination Hall after leaving the answer book in your seat. Handover the answer book to the invigilator before leaving the Hall.
- Fill all the required fields.

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 Maintain performance in
 My Exam!

Please enter your Roll No. & Name
Riya Elsa Philips
T5
Roll No. 44

Figures

3 5 4 4

Words

Three five four four



Section C

24) Right to Information Act (2005) is an act of the parliament which is passed to provide the basic right to information to the citizens of India and to replace the previous Freedom to Information Act, 2002. The citizens can approach any public authority regarding the right to avail any category of information, the public authority is required to reply within 30 days. They are also expected to classify the information for the purpose of dissemination and to provide information to the citizens so that they can look up the category.

~~This~~ This right is extended to the whole of India, except for Jammu and Kashmir. The main elements of this particular Act is -

- > public authority

- > third party information
- > Record.



The salient features of the RTI Act are. The information may be in the type of a journal, message, book, financial records, management principals, economic and social problems, email, etc.

The citizen can approach the public authority for the access or retrieval of information and can receive a response within thirty days.

A public authority according to section 2(e) of this Act can be defined as any authority or body or institution of self-government established or constituted-

- by or under the constitution
- by any law made by the ^{parliament} constitution
- by any law made by the ^{state legislature} parliament
- by notified message or by any appropriate government which is

- i) body controlled, owned and substantially financed
- ii) non-government organisation which is substantially financed directly or indirectly by public or private funds.

• Every citizen has the right to avail information regarding various aspects of business, economy, political and social issues, basic information, etc.

• This Act helps to bring in integrity and ~~sovereignty~~ sovereignty among the nation.

• Information related to a third party cannot be disclosed to the citizen availing for information.

• Third party is any person other than the public authority and citizen. Information relating to confidential





- pieces of the third party cannot be given. For example, medical report from a government hospital or power bills of the authority.
- An appropriate government is the body which is constituted, owned, controlled and substantially financed by:
 - A central government body: The central government
 - A state government body: The state government.
- The entities which are formed under the public authority is
 - > Constitutionally formed parliament, state ~~parliament~~ ^{legislature}, Preamble, human rights, etc etc.
 - > High courts, certain laws, etc formulated by the legislature and parliament.

- A citizen can request for information through the RTI Act portal.
- If the information exceeds 3,000 words, a document is forwarded containing all the necessary information.
- This helps ~~to~~ ⁱⁿ the traceability and accountability of information passed.
- It creates a good bond among the citizens of the nation and government.
- It creates a efficient and effective records management of information.
- It ensured that citizens are empowered to participate in the issues of the country.
- It creates a regime for the citizens to feel a sense of belongingness.

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and equality.

RTI Act has developed the country and has helped in the economical improvement of the nation.

(25) Pollution is the ~~contaminant~~ ^{contamination} of different elements of the ecosystem. It may be in the form of air, water, noise, soil, land, thermal power, etc. It needs to be controlled in order to ~~have~~ ^{live} a peaceful life. Small changes in the lifestyle of human beings can create large changes in the prevention of pollution. Organisations and businesses can jointly tackle this problem by adopting eco-friendly practices which would have a great impact on the nation. Small changes in an individual can also bring changes

In the working of the environment certain ways in which pollution can be prevented are mentioned below-

1) Minimizing wastage

Resources play a vital role in the ecosystem and nothing can replace its value and benefits. They should be judiciously used with minimum wastage. A careful check on its utilization should be followed.

2) Creating awareness

Proper awareness programmes need to be implemented in workplace, schools, colleges, public gatherings, etc. so that the citizens can be well-informed about how dangerous the impact of pollution is for the environment. It needs to be treated very carefully, for that to happen the public should be aware of their role as well.





3) Planting trees

Trees have been cutting down and its still in practice for the purpose of urbanisation, agricultural and industrial expansion, using it as fuel, etc. This leads to immense effects which mainly results to a rise in carbon dioxide. More trees should be planted to overcome this.

4) Proper disposal

Solid, liquid and gaseous disposal of waste should be carefully managed. It may lead to air, water, land and soil pollution. It should be disposed in an orderly and safe manner.

5) Garbage bin

A large bin for the disposal of household waste in a community should be implemented. This would



allow individuals to dispose their household waste and after they are collected, the local authorities can eliminate such wastes in a harmless manner.

6) Usage of water

Water is an essential component of the environment. It should be carefully used as shortage of water is possible in today's world. Using only the required water for bathing, washing, cooking, etc needs to be done.

7) Usage of paper

As we use more and more paper, thousands of trees are being cut all over the world; Making use of the available technology in recording, billing and analyzing data can be adopted instead of using paper for

this use.



9) Sound effects

Listening to high volume sound can lead to number of health problems which would be hard to treat. It also affects the environment. Minimizing the sound of vehicles, audio, events, etc can help in reducing such effects.

10) Imparting knowledge

Knowledge regarding the conservation of environment and prevention of pollution should be greatly provided to all those around you. Being well informed about such issues can help in understanding the ~~serous~~ ^{seriousness} of the problem at stake.

11) Acquiring skills

Proper education on tackling environmental issues can help

to adopt skills and techniques that would help to minimize the problems of pollution:

12) Use of electricity

Switching off of lights, fans, AC's, etc can lead to a great impact. Generating of electricity involves a lot of energy and that can be minimized if we are more vigilant.

13) Household vegetation

As urbanization has taken place, the vegetation of various plants have been destroyed. By growing plants in your backyard, small changes to the available space would create a difference.

14) Water for birds

Creating a water availability in the form of a pot, container or vessel





In your terrace or open space can help to provide water for the winged animals. With the level of water decreasing and its quality, birds are having a very hard time.

15) Recycling

Recycling of plastics and other materials would create an immense effect on the environment. The 3R's - Recycle, Reuse and Reduce should be very well implemented. It would help in increasing the availability of resources and decrease pollution.

By adopting the above mentioned techniques & methods, a better environment for all human beings can be formed. A world would be a better place to live. It is our job to conserve and preserve the resources provided to us.

so over-exploiting it and causing pollution should be reduced and controlled.

Section B



- 13) Natural resources are the naturally formed components of the environment. It can be inherited from the surface of the earth. They play a vital role in the development of various nations and in the basic needs of human beings. Different types of natural resource are -
- i) Renewable Resource
 - ii) Non-Renewable Resource.

RENEWABLE RESOURCES

These are resources which cannot be exhausted. It is recurring in nature. These resources are briefly explained below.



- Sun - The solar energy is needed by both plants and human beings. It helps other resources to formulate it's energy. It is the most important source.
- Water - It is most essential resource. It covers 83% of the total area on earth.
- Air - The atmosphere available above the surface area. It consists of water vapour and other gases like carbon dioxide, hydrogen, oxygen, etc.
- Biogas - It is absorbed from the nature and is renewable in nature.

NON-RENEWABLE RESOURCE

These are resources which are exhaustible in nature. It does not occur that easily. It is extracted by digging underground. It consists of valuable stones, power, gas, etc.

- Fossil Fuels - It consists of coal, iron, etc. Coal is known as black diamond.
- CNG's - compressed natural gas is used for household purposes of cooking. It is exhaustible in nature.
- Nuclear power - For emitting high radioactive energy, uranium is required along with boron, magnesium, etc.
- Thermal power - Atoms of radioactive energy are held under high temperature and pressure to form such a high power.



14) Green Marketing is the technique used in marketing by business to spread environmental concerns and selling eco-friendly products. They adopt marketing techniques which are least harmful for the environment. The advantages



of such marketing are -

① Making GREEN by Being GREEN

By adopting environmental techniques and method of marketing, eco-friendly products can also be developed for customers. It creates a safe and secure image for businesses.

② COMPETITIVE ADVANTAGE

More customers will be attracted to products that focus on the conservation of environment. When businesses adopt such unique methods, customers would prefer such products over the other products available in the market.

③ GENERATING PROFITS

Profits can be measured at large as there is a strong customer base

for environmental friendly products. Adopting right ways can fetch higher revenue for businesses and would help in the survival and expansion of its operations.

④ SAFE ENVIRONMENT

The public would feel a sense of security and safe environment when they trust such organisations. Pollution would decrease at large paving way for conservation of resources.

⑤ SUSTAINABILITY

By caring for the present resources that are available, future generations would benefit from the effort of saving and halting a safe economy to practise business concerning resources ~~also~~ would be highly possible if green marketing is adopted





by businesses in today's world.

(17) Ecotourism is a type of tourism which involves tourists visiting places of high heritage and preserve. It consists of various activities like site seeing, camping, trekking, angling, elephant ride, ayurveda, etc. It has both positive and negative impacts -

POSITIVE IMPACTS

- It helps in preserving the heritage of various cultures and tribes.
- Provides employment to tribal ~~area~~ people.
- Aware of the species ~~of~~ ^{that} are available to us in both scenic and living beauty.
- Gaining knowledge about the history of culture, religions.

information based on plant and animal species, etc.

- Increased the income of the people which would lead to an increase in the level of profits earned in the country.
- Leads to economical, social and cultural development.
- It helps to preserve and conserve the species of a certain locality.

NEGATIVE IMPACTS

- The building of such eco-tourism spots leads to deforestation and occupation of land which are meant to be available for the animal species.
- It restricts the freedom of animals to move from place to place.
- Water-related activities like angling, fishing, canoeing, etc may disrupt the life of aquatic life.





- The true meaning and reason for preserving these species will be overpowered by the thought of earning more profit.

✓ Life of tribal people and their localities would be very much disturbed.

(a) Environmental studies involves the scientific study of the living organisms and it's interactions with each other and nature. It also includes social and cultural factors and it's impact on man. It is a multi-disciplinary study of issues concerned with the nature and it's surroundings. It's scope is vast and is mentioned below.



SCOPE

1. ENVIRONMENTAL AWARENESS

A proper awareness based on the conservation of resources, plants and animals and it's impact on the ecosystem should be made and implemented among the public.

2. ENVIRONMENTAL PROTECTION

To protect mother nature, all resources and available sources should be well utilized and avoid wastage.

3. SOLUTIONS FOR ENVIRONMENT PROBLEMS

The study helps to analyse various aspects and develop solutions for environmental problems that may arise.

4. CONSERVATION OF RESOURCES

Sustainability & judicious use of resources for ~~the~~ future should be



be followed.

IMPORTANT

- ⊕ Concern about environmental issues can be brought into light.
- ⊕ Imparting knowledge and acquiring skills related to environmental friendly activities would help to keep the public fully aware.
- ⊕ The study has helped in analysing problems and developing solutions and prevention techniques.
- ⊕ Development without destruction has been clearly informed through these studies.
- ⊕ It has helped to reduce pollution, conserve resources and in the sustainable development of the economy.

(20) Right to Information Act (2005) is an act of parliament passed by the constitution of India to provide the right to information to every citizen availing it and to replace the Freedom of Information Act, 2002. The citizen can approach any public authority to gain access to the required information. The public authority would respond ^{within} ~~in~~ thirty days and is responsible for classifying information for the purpose of dissemination and to provide a category of information to the general public. This Act is extended to every part of India except for the state of Jammu and Kashmir. The main elements of RTI Act is -

- (a) A public authority
- (b) Third party





(c) Record.

OBJECTIVES

- > To gain traceability and accountability of information passed.
- > To create a regime that secures every information retrieved and made available
- > To empower citizens in the participation of various political issues in the country.
- > To create a bond of trust among the citizens and government
- > To develop a effective and efficient records management of information.

(21) The local environmental issues -

① SOIL ~~EROSION~~ EROSION

The depletion of the upper layer of soil is soil erosion. It is

widely seen in many parts where there is sloppy land of vegetation. It is of raising concern and decrease the quality of soil.



② LAND SLIDING

The sliding of land over the other piece of land is land sliding. It affects the house ^{of many} and vegetation.

③ FLOOD

In places where proper drainage systems and control of over-flooded is poor, the management of flood is very concerning. It leads to the destruction of land, affects crops and plants and results in the death of many human beings.

④ EARTHQUAKE

Earthquake is the destruction caused by tremendous amount of shaking

below the surface of the earth. It leads to an immense disaster and can result in huge number of deaths.

⑤ ACID RAIN

Acid rain is the rain which contains harmful substances of nitrogen, sulphuric dioxide, etc. It is caused by the amount of thermal energy produced by industries.

Section (A)

① Environment is the surrounding in which all organisms live.

It can also be called the biosphere. It consists of the atmosphere, hydrosphere and lithosphere. It comprises mainly of two



Components - biotic and abiotic components.



② Universal Declaration of Human Rights (UDHR) was formed on 10th December 1948. It was later in force in 1966. It consisted of the International Bill of Human Rights.

It was enforced in 1976. It consists of one preamble and 30 articles. The articles consist of

- Article 1-3: Basic concepts on religion, caste, culture, etc.
- Article 4-5: The basic rights of a human being
- Articles 6-11: The fundamental legality of such rights
- Article 12-16: The rights of human being towards the community.
- Article 17-21: Rights which involve aspects like economy, social and

Culture -

Article 22-27: Rights that are to granted to each level of people

Article 28-30: Areas in which these rights should be implemented

3. Renewable resources are resources which are not exhaustible in nature and cannot be replaced. They are -

- > Sun
- > water
- > air
- > land
- > soil



4 The basic human rights are as follows -

- (a) Right to life
- (b) Freedom of speech

(c) Freedom of Expression (d) Voting Rights

(e) Right to Fair Trial

(f) Right to Informate

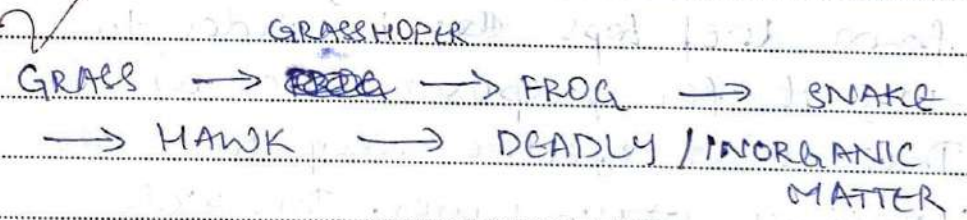
(g) Equality before the eyes

(h) Freedom of Religion



5. Food chain is the transfer of energy from one trophic level to another. The energy is transferred from producer (grass) to consumers (i.e. carnivores, herbivore, omnivorous) to decomposer (inorganic matter).

The ~~digestible~~ ^{chain} explanation is given below:





6) Biodiversity is ^{the} variance or variability of living organisms with the non-living components of the environment.

Types:

- Species biodiversity: consists of different number of species.
- Genetic biodiversity: consists of species with different colours, shape, size, etc and other characteristics.
- climatic biodiversity: Based on the changes in climate, species are formed together.

3) Rain water harvesting is the technique of collecting rainwater from roof tops ~~to~~ in order to use it for purposes later on. This is an effective way to conserve ~~water~~ water. This water is directed to a container which is mostly situated underground.

This way water is saved and stored for later use.



1) Green banking is the environmental banking practices and techniques adopted by banks to reduce carbon produce and to improve the level of operations and technology. This helps to save time, save cost, reduce harmful carbon emissions, etc. Various initiatives like installation of Place of Sale machine, windmills, e-vigilance, etc is adopted.

10) Rainwater harvesting is the technique of collecting rainwater from roof tops in order to use it for purpose later on. This is an effective way to conserve



water. Mr. water is directed to a container which is mostly placed underground and is used to conserve and save until it's demanded.

12) According to Right to Information Act (2005), section 2(e), Public authority can be defined as an authority or body or institution of self-government established or constituted -

> by or under the constitution

> by any law made under the Parliament

> by any law made under the the state legislatures

> by notified message or by the appropriate government which is -

i) body owned, controlled and substantially financed

ii) Non-government organisation substantially financed ~~by~~ directly or indirectly by public funds.

_____ X _____





SAINTGITS COLLEGE OF APPLIED SCIENCES

ANSWER BOOK FOR UG PROGRAMME

Degree: B.com Semester: Y

Stream: Taxation Examination: MODEL EXAMINATION, Jan 2020

Course Code: Course Title Environment Management & Sustainability

Total No. of Pages written

	Qn. No.	Mark
Section A Answer (Any 10)	1	1
	2	
	3	1
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	1
	12	
Section B (Any 6)	13	
	14	
	15	
	16	
	17	2
	18	
	19	1 1/2
	20	
	21	
Section C (Any 2)	22	
	23	
	24	
	25	1 1/2

Total Marks 8

Instructions to Candidates:

1. Write all informations required in the front, page of the answer book.
2. Write in black or in blue ink.
3. DO NOT WRITE YOUR NAME OR REGISTER NUMBER IN ANY PART OF THE ANSWER BOOK EXCEPT IN THE SPACE PROVIDED FOR IT IN THE FRONT PAGE.
4. Do not bring in any manuscript or any loose sheets of paper other than your Hall Ticket into the Examination Hall.
5. Do not resort to copying from your neighbour or from any other source.
6. Do your rough work on the right hand side against each answer and mark it off from the answer.
7. Do not walk in the Examination hall, but stand up to draw the attention of the invigilator for anything you may need.
8. Use of calculators is allowed only for those subjects which University permits from time to time.
9. Do not take answer book outside the Examiantion Hall.
10. Do not leave the Examination Hall after leaving the answer book in your seat. Handover the answer book to the invigilator before leaving the Hall.
11. Fill all the required fields.

Feedback Needs to work harder !!

Please enter your Roll No. & Name
Libin Vaskey kumalose
15 33

Figures 3 3

Words Three Three

1 Environment is the surroundings we live in. It contains all living and non living organisms.

3 Renewable resources are the resources that can reproduce like wood, water, solar energy, electricity.

11 E-waste means electronic waste that is harmful to the nature. E-waste is caused by the electronic gadgets that is non usable.



- To know the information about an issue
- To understand the value of a citizen in the society
- social justice
- Right to information Act ensures every citizen equal justice and equal right about information.
- acknowledgement



- 17. positive impacts of ecotourism
- people gets awareness about the environment and nature
- ecotourism reduces non degradable products like plastics etc.
- ecotourism didn't affects the biodiversity of the nature.

- Negative impacts of ecotourism
- ecotourism cause destruction and affects the living organisms

SAINTGITS



25

Role of individuals in prevention of pollution.

Reduce the use of non-renewable goods.

people can reduce the use of non-renewable goods by setting limits and reduce the usage of ~~plastic~~ non-renewable goods like plastics, etc are not ~~is~~ permissible so it must recycle and reuse for reducing the pollution.



12/10/2020
Monday

EVM (T.P)

Arnela Susann George
T5, Rollno: 13

① What are endangered species?

Endangered species are animals or plants which exist in very less numbers and if not conserved properly, will become extinct. In India, around 450 plant species, 100 mammals and around 150 types of birds are considered as endangered. More species are coming under the endangered category every year.

② What are endemic species?

Endemic species are plants or animals that exist in some particular regions and nowhere else in the world. In India, endemic species are mostly in Himalaya and Western Ghats. The endemic animals in India are: -

- * Lion tailed macaque
- * Nilgiri Langur
- * Brown Palm Squirrel
- * Nilgiri Tahr

③ What are biodiversity hotspots?

Hotspots are the richest and most threatened reservoirs of plant and animal



life on earth. They have the maximum numbers of endemic species. The 25 terrestrial hot spots have been identified for the conservation of biodiversity.

④ What are acid rains?

Acid rain is caused when pollutants present in the air mix up with the rain and fall back on the ground. The polluted water could dissolve away some of the important nutrients found in soil and change the structure of the soil.

⑤ What are megadiverse countries?

The term megadiverse countries refers to a group of nations that harbour the majority of Earth's species and high numbers of endemic species. Two criteria are applied in choosing megadiverse countries:-

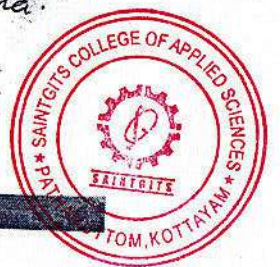
(.) It should have more than 5000 species of vascular plants.

(.) It should have marine ecosystems as its boundary.

India satisfy both the above criteria.

⑥ What is Eutrophication?

Eutrophication is a condition



where high amount of nitrogen present. In some pollutants get developed on sea's surface and turn itself into algae and adversely affect fish, plants and animal species. The green coloured algae is present on lakes and ponds is due to presence of this chemical.

⑦ Explain global warming.

Global warming is the unusually rapid increase in Earth's average surface temperature over the past century primarily due to greenhouse gases released by people burning fossil fuels. Climate change includes global warming which is by human emission of greenhouse gases.

⑧ Explain Disaster management.

Disaster management can be defined as the organisation and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response, and recovery in order to lessen the impact of disasters.

⑨ Explain water shed management.

Water shed management is the study of the relevant characteristics of a



watershed aimed at the sustainable distribution of its resources and the process of creativity and implementing plans, programs and projects to sustain and enhance watershed functions that affect the plant, animal and human communities within the watershed boundary.

⑩ Explain rainwater harvesting

Rainwater harvesting is the collection and storage of rainwater than allowing it to run off. Rainwater is collected from a roof-like surface and redirected to a tank, clay pit, aquifer or a reservoir with percolation. Dew and fog can also be collected with nets and/or other tools.

Role of an individual in conservation of natural resources



→ Role of individual in generating resource demand

At the back of the demand for each and every commodity there are isolated choices made by consumers. Each individual as a consumer has every right to choose what she/he prefers within the income level. Although consumer as an entity is free to choose whatever his/her prefers but careless choice for resource use can lead to a situation where we eventually use up all our resources such as water, mineral, land etc. at a rate which is not sustainable. Consumer should be careful about wastage and creating demand for newer forms of goods & services that ensure a sustainable lifestyle for higher

no. of people on earth.



→ Conservation at home

Starting with the home, the potential of conservation is there at every stage of day to day life. One of the most important resources that could be discussed first is the water resource. Simply being careful about water not flowing out of the tap unnecessarily can save the scarce resource being wasted in gallons. Besides, as a consumer one should be very careful about what type of water he/she chooses for what ~~type~~ of water purpose. One good measure for conservation of water is rain water harvesting.

An alternative choice for appliances used at home has huge energy and resource saving potential. A 24 watt tube light generates no less than 1000 lumens than a 100 watt bulb. Energy saving is even higher in CFL bulbs.



→ Conservation in transport

Transport sector has huge resource saving potential. Use of public transport is a good way to conserve huge amount of resource per head. Consumers can basically play a very important role if they generate large demand for comfortable public transport, then investors (both public & private) will be interested in investing in this sector. ~~It will~~ More use of pollution free vehicles such as bicycle, trams which eventually has no/very low energy requirement could play an important role in energy conservation.

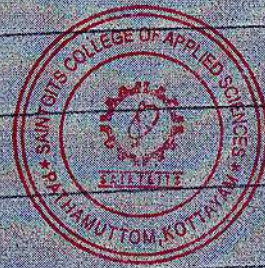
→ Conservation at work place

At workplace also very simple things such as putting the light off when not needed, use of individual air conditioning machine instead of central cooling system can result in lot

of energy conservation. Because in all the rooms in an office, the need for cooling is not likely to be the same.

→ Equitable use of resources for sustainable lifestyle.

Resource conservation has an important implication for increase in equity in resource use. This equity had never been at place. It has been generated due to various reasons: geographical location of resource itself is random.



Course Evaluation Feed Back

Semester : V

Programme: B.Com Taxation

Subject with Code: CO5CRT15 Environment Management and Human Rights

Faculty: Preetha Thomas (PT)

Roll No	Register No	Name	Course Evaluation Feedback					Average
			1	2	3	4	5	
			CO 1	CO 2	CO 3	CO 4	CO 5	
Course Outcome			CO 1	CO 2	CO 3	CO 4	CO 5	Average
1	180021066791	AARATHI M BALAKRISHNAN	4	4	4	3	5	4.00
2	180021066792	AAVANI V R	4	5	4	4	4	4.20
3	180021066793	ABHIRAM S	3	4	4	3	4	3.60
4	180021066794	ABHIRAMI VIJAYAN	4	4	4	3	5	4.00
5	180021066795	ADARSH T SABU	4	5	4	4	4	4.20
6	180021066796	AHNA RAICHEL VARGHESE	4	5	3	4	4	4.00
7	180021066797	AJO ALEX	5	5	5	5	5	5.00
8	180021066798	AKASH DEEPU	5	5	5	5	5	5.00
9	180021066799	AKHIL VATHUPARAMPIL JACOB	4	4	3	4	4	3.80
10	180021066800	AKSHAYMON SAMUEL	4	4	3	4	4	3.80
11	180021066801	ALBIN ABRAHAM	4	3	4	3	5	3.80
12	180021066802	ANAN GEORGE KOSHY	4	4	4	4	4	4.00
13	180021066803	ANEETA SUSAN GEORGE	3	4	4	3	3	3.40
14	180021066804	ANIL GAYATHRI	4	4	4	4	4	4.00
15	180021066805	ANU M	5	5	5	5	5	5.00
16	180021066806	ANURAG A K	4	4	4	4	4	4.00
17	180021066807	ARAVIND RAJAGOPAL	4	2	3	3	4	3.20
18	180021066808	AROMAL RAVEENDRAN	5	5	5	5	5	5.00
19	180021066809	ASHLY SARA KOSHY	5	5	5	4	5	4.80
20	180021066810	ASWIN P KUMAR	4	4	4	4	4	4.00
21	180021066811	ATHIRA MOHAN	5	5	5	5	5	5.00
22	180021066812	BALAKRISHNAN J	4	5	4	5	4	4.40
23	180021066813	CHRISTEENA MARIA GEORGE	4	4	4	4	4	4.00
24	180021066814	EBIN JOY	4	4	3	5	4	4.00
25	180021066815	EMIL GEORGE EAPEN	4	4	4	4	5	4.20
26	180021066816	JACOB KEVIN MATHEW	4	4	3	4	3	3.60
27	180021066817	JAKE RONEY	3	3	3	3	3	3.00
28	180021066818	JELITA ELIZABETH MATHEW	5	5	5	5	5	5.00
29	180021066819	JOHAN GEORGE SEN	4	4	4	4	4	4.00
30	180021066820	JYOTHI KRISHNA	4	4	4	5	4	4.20
31	180021066821	K AMAL AJI	4	4	5	5	4	4.40
32	180021066822	K PHILIP THOMAS	3	4	4	3	4	3.60
33	180021066823	LIBIN VARKEY KURIAKOSE	5	5	4	4	4	4.40
34	180021066824	MARION OOMMEN	5	5	5	5	5	5.00
35	180021066825	MEENU E.M	4	4	4	4	4	4.00
36	180021066826	MIDHUN V THOMAS	3	4	5	5	3	4.00
37	180021066827	MILIE HASEEB	4	4	5	5	3	3.80



38	180021066828	NEHA ANN JOSEPH	3	4	4	3	3	3.40
39	180021066829	NEVIL VARGHESE ABRAHAM	5	5	4	4	4	4.40
40	180021066830	NIDHIN RAJ	5	5	5	5	5	5.00
41	180021066831	PAVITHRA N	4	4	4	4	4	4.00
42	180021066832	PRIYANKA ANNA LESLIE	5	4	4	4	3	4.00
43	180021066833	REN P THOMAS	4	4	5	3	3	3.80
44	180021066834	RIYA ELSA PHILIPS	3	4	4	3	4	3.60
45	180021066835	SAIN KARINGATTIL PRADEEP	5	5	4	4	4	4.40
46	180021066836	SANDRA ACHU THOMAS	5	5	5	5	5	5.00
47	180021066837	SANDRA NINAN	4	4	4	4	4	4.00
48	180021066838	SANDRA SUSAN JOHN	4	4	4	4	4	4.00
49	180021066839	SHAROOKE F SHAJI	4	4	5	4	3	4.00
50	180021066840	SNEHA SARA MATHEW	3	4	4	4	5	4.00
51	180021066841	SNEHA THOMAS	5	5	4	4	4	4.40
52	180021066842	SREYA RAJESH	5	5	5	5	5	5.00
53	180021066843	STACY ELSA JOHN	4	4	4	4	4	4.00
54	180021066844	STENIMOL ELSA ABRAHAM	3	4	3	4	5	3.80
55	180021066845	TIBIN THOMAS	4	4	5	3	3	3.80
56	180021066846	VAISHAKH BABU	3	4	4	4	4	3.80
57	180021066847	VISHNURAJ B	5	5	4	4	4	4.40



Analysis of Course Outcomes (COs)

Semester : V

Programme: B.Com Taxation

Subject with Code: CO5CRT15 Environment Management and Human Rights

Faculty: Preetha Thomas (PT)

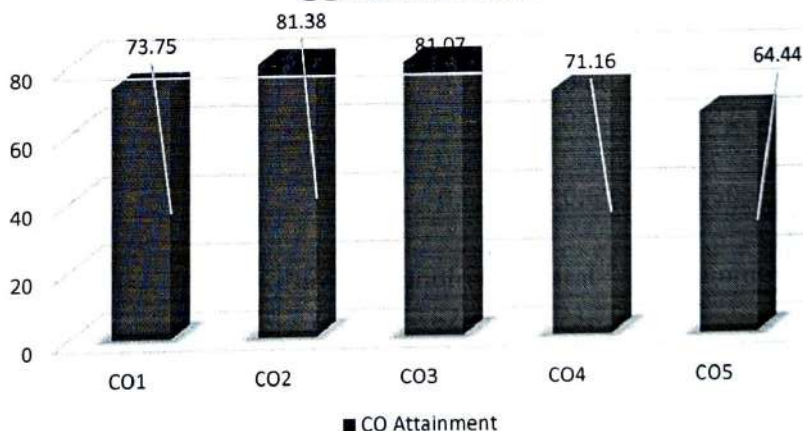
Sl No.	Register No	Name	Final CO Evaluation (80% of (Series Exam 50% Weightage + Assignment 30% Weightage)+ 20% (Feed back 20 %)				
			CO 1	CO 2	CO 3	CO 4	CO 5
1	180021066791	AARATHI M.BALAKRISHNAN	0.83	0.68	0.46	0.42	0.51
2	180021066792	AAVANI V R	0.89	0.69	0.86	0.56	0.60
3	180021066793	ABHIRAM S	0.80	0.66	0.55	0.68	0.50
4	180021066794	ABHIRAMI VIJAYAN	0.90	0.68	0.58	0.42	0.51
5	180021066795	ADARSH T SABU	0.79	0.69	0.54	0.52	0.48
6	180021066796	AHNA RAICHEL VARGHESE	0.82	0.73	0.49	0.76	0.57
7	180021066797	AJO ALEX	0.98	0.79	0.59	0.50	0.54
8	180021066798	AKASH DEEPU	0.94	0.70	0.60	0.67	0.54
9	180021066799	AKHIL VATHUPARAMPIL JACOB	0.77	0.59	0.44	0.63	0.43
10	180021066800	AKSHAYMON SAMUEL	0.69	0.51	0.30	0.40	0.59
11	180021066801	ALBIN ABRAHAM	0.82	0.61	0.62	0.63	0.55
12	180021066802	ANAN GEORGE KOSHY	0.69	0.66	0.58	0.52	0.48
13	180021066803	ANEETA SUSAN GEORGE	0.86	0.66	0.68	0.70	0.42
14	180021066804	ANIL GAYATHRI	0.89	0.71	0.58	0.68	0.59
15	180021066805	ANU M	0.93	0.73	0.64	0.89	0.57
16	180021066806	ANURAG A K	0.72	0.58	0.62	0.43	0.40
17	180021066807	ARAVIND RAJAGOPAL	0.88	0.60	0.59	0.71	0.49
18	180021066808	AROMAL RAVEENDRAN	0.76	0.62	0.66	0.60	0.56
19	180021066809	ASHLY SARA KOSHY	0.79	0.63	0.61	0.65	0.50
20	180021066810	ASWIN P KUMAR	0.69	0.64	0.58	0.50	0.48
21	180021066811	ATHIRA MOHAN	0.62	0.61	0.67	0.45	0.54
22	180021066812	BALAKRISHNAN J	0.75	0.58	0.63	0.65	0.40
23	180021066813	CHRISTEENA MARIA GEORGE	0.86	0.58	0.80	0.70	0.56
24	180021066814	EBIN JOY	0.86	0.69	0.75	0.56	0.54
25	180021066815	EMIL GEORGE EAPEN	0.82	0.69	0.62	0.46	0.60
26	180021066816	JACOB KEVIN MATHEW	0.81	0.68	0.58	0.55	0.65
27	180021066817	JAKE RONEY	0.82	0.61	0.54	0.61	0.46
28	180021066818	JELITA ELIZABETH MATHEW	0.81	0.64	0.87	0.85	0.66
29	180021066819	JOHAN GEORGE SEN	0.90	0.62	0.80	0.67	0.49
30	180021066820	JYOTHI KRISHNA	0.76	0.62	0.55	0.59	0.49
31	180021066821	K AMAL AJI	0.56	0.41	0.38	0.44	0.34
32	180021066822	K PHILIP THOMAS	0.85	0.67	0.56	0.80	0.50
33	180021066823	LIBIN VARKEY KURIAKOSE	0.58	0.47	0.37	0.37	0.34
34	180021066824	MARION OOMMEN	0.93	0.70	0.72	0.62	0.93
35	180021066825	MEENU E.M	0.86	0.68	0.63	0.71	0.56
36	180021066826	MIDHUN V THOMAS	0.85	0.69	0.63	0.58	0.67
37	180021066827	MILIE HASEEB	0.82	0.61	0.63	0.70	0.36
38	180021066828	NEHA ANN JOSEPH	0.86	0.66	0.57	0.78	0.52
39	180021066829	NEVIL VARGHESE ABRAHAM	0.85	0.72	0.80	0.55	0.50
40	180021066830	NIDHIN RAJ	0.72	0.58	0.50	0.50	0.50
41	180021066831	PAVITHRA N	0.89	0.69	0.49	0.76	0.56
42	180021066832	PRIYANKA ANNA LESLIE	0.87	0.67	0.63	0.46	0.70



43	180021066833	REN P THOMAS	0.85	0.66	0.75	0.42	0.49
44	180021066834	RIYA ELSA PHILIPS	0.80	0.65	0.59	0.71	0.48
45	180021066835	SAIN KARINGATHIL PRADEEP	0.80	0.61	0.69	0.55	0.46
46	180021066836	SANDRA ACHU THOMAS	0.90	0.74	0.78	0.57	0.54
47	180021066837	SANDRA NINAN	0.89	0.68	0.55	0.65	0.55
48	180021066838	SANDRA SUSAN JOHN	0.82	0.67	0.62	0.84	0.55
49	180021066839	SHAROOKE F SHAJI	0.82	0.65	0.56	0.46	0.49
50	180021066840	SNEHA SARA MATHEW	0.68	0.62	0.78	0.49	0.54
51	180021066841	SNEHA THOMAS	0.93	0.71	0.49	0.82	0.56
52	180021066842	SREYA RAJESH	0.84	0.61	0.57	0.66	0.48
53	180021066843	STACY ELSA JOHN	0.90	0.70	0.64	0.73	0.55
54	180021066844	STENIMOL ELSA ABRAHAM	0.80	0.68	0.83	0.55	0.61
55	180021066845	TIBIN THOMAS	0.85	0.71	0.60	0.76	0.45
56	180021066846	VAISHAKH BABU	0.57	0.46	0.34	0.41	0.39
57	180021066847	VISHNURAJ B	0.90	0.71	0.63	0.62	0.53
Average			0.81	0.65	0.61	0.60	0.53

Course Outcomes	Direct	Indirect	Total	Attainment Level
CO1	71.57	82.46	73.75	H
CO2	80.32	85.61	81.38	H
CO3	80.55	83.16	81.07	H
CO4	68.77	80.70	71.16	H
CO5	59.94	82.46	64.44	H

CO Attainment



Impact

Remedial Suggestions :

Renitha Thomas
Teacher In-Charge

Arshad

HEAD OF THE DEPARTMENT

Proof of Experiential Learning

CO5CRT15: Environment Management and Human Rights



Rainwater Harvesting at Akshaymon Samuel's House. Photo shot on his Redmi Note 8 pro.



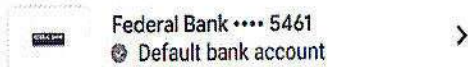
Rainwater Harvesting at Sneha Thomas' House



Mobile Banking undertaken by students:

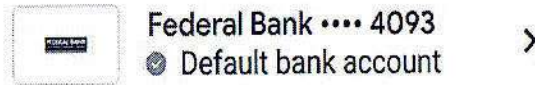


BANK ACCOUNTS AND CARDS



- Invite and earn
Share this code jt6el59 [Invite](#)
- Settings
- Help and feedback

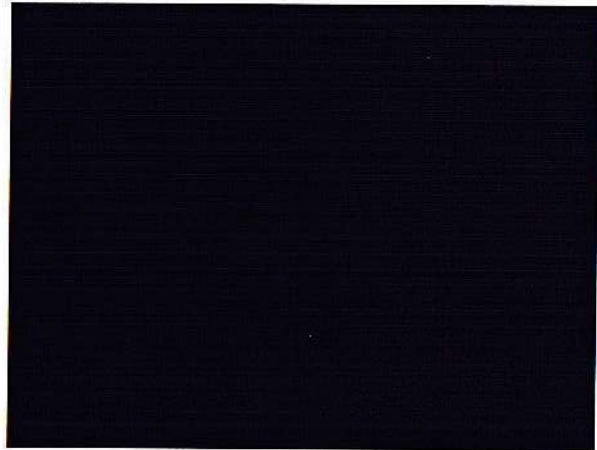
BANK ACCOUNTS AND CARDS



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- Help & feedback



POSITIVE AND NEGATIVE IMPACTS OF ECO-TOURISM



What is ecotourism?

Ecotourism (also called sustainable tourism) can be said as a form of travel in which we go to the local environment and support them instead of exploiting them.

As well as it is a part of environmental conservation, and understanding what the needs of the people are who are local to the area so that you can help to improve their quality of life.

Positive impacts of eco-tourism

- It acts as a deterrent to the poachers as there will be constant tourists coming up for visiting the places.
- Creates an interest and awareness among the people about the indigenous flora and fauna. Also acts as a forum to educate the importance of conservation.
- Leads to good economic development in areas surrounding the reserves.
- An increase in the revenue from tourism sector



- Preservation of local culture.
- Locals get more employment opportunities.
- The locals would be encouraged to take care of the area where they reside in.

- Any kind of mismanagement of eco-tourism can lead to more harm than any little good it actually does.
- It also takes away the livelihoods of the locals and in turn are given low paid positions in the resorts. No viable long lasting employment with a scope of growth.

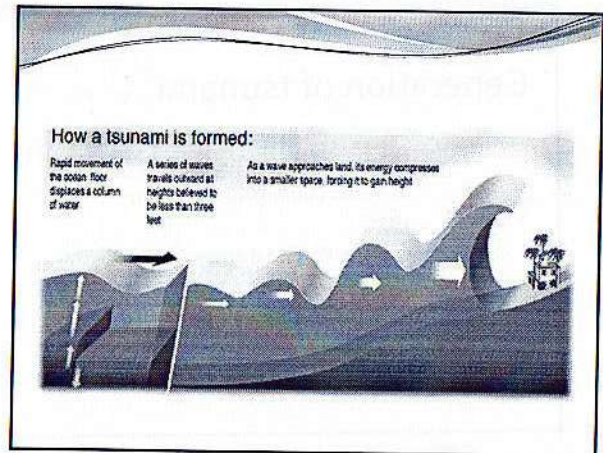


- Negative impacts of eco-tourism**
- They only focus on basic conservation of flora and fauna that's sufficient to attract the tourists. The tourists always go around in vehicles which results in pollution as well as it scares the animals too. They also leave behind garbage such as plastic bottles etc that leads to environmental degradation.
 - To increase the demand of this eco tourism, people are clearing off the parks and sanctuaries through deforestation to build up more hotels and resorts.



TSUNAMI

"AN INEVITABLE MONSTROSITY"

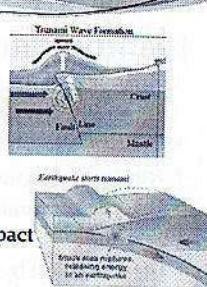


What is tsunami?

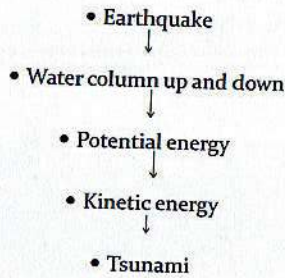
- A tsunami is a series of waves created when water moved very quickly.
- Under water earthquakes are the most common causes of tsunami, but underwater volcanic activity can also trigger a displacement in the water, and create a mega-wave.

CAUSES

- Volcanic eruption
- Icefalls
- Heavy rainfall
- Seismic activity
- Submarine landslides cosmic impact



Generation of tsunami:



EFFECTS

- Damaging property
 - Loss of life
 - Flooding and contamination of drinking water
 - Environmental impacts
1. Solid waste and disaster debris
 2. Radiation from nuclear plants
 3. Psychological effect
 4. Post traumatic stress disorder(PTSD)

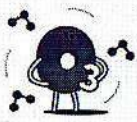


phenomenon

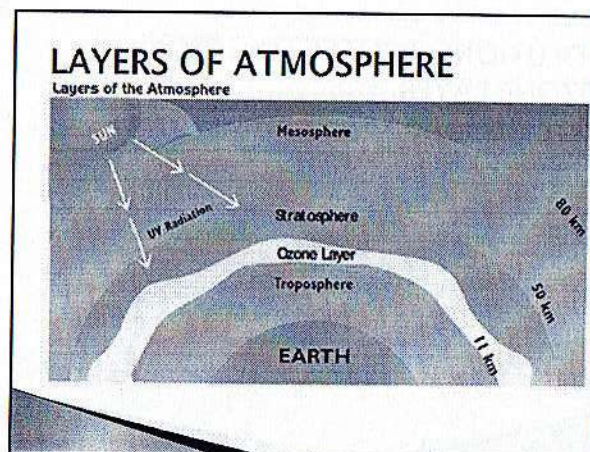
- Tsunami is not a singular wave but a series of waves like an ordinary waves can see on beach
- Ordinary waves have 100mts
- Tsunami have a wave length of 500kms
- The speed of tsunami waves across deep sea is 1000 km/hr
- The energy lost by tsunami waves is inversely proportional to the wavelength.

WHAT TO DO AFTER TSUNAMI

- Continue listening to a NOAA weather radio, coast guard emergency frequency station, or other reliable sources for emergency information
- Help injured or rapped person
- Use he telephone only for emergency
- Stay out of the building if waters remain around it
- Inspect foundations for cracks or other damage
- Examine walls ,floors ,doors ,staircases , and window to make sure that the building is not in danger or collapsing



OZONE IS...
Ozone is a form of oxygen with 3 oxygen atom(O₃)

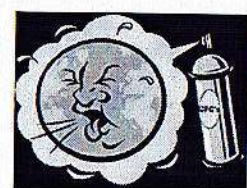


WHAT IS OZONE LAYER

- ▶ The ozone layer refers to a region of Earth's stratosphere that absorbs most of the Sun's ultraviolet (UV) radiation.
- ▶ It contains high concentrations of ozone (O₃) relative to other parts of the atmosphere.
- ▶ Atmospheric ozone absorbs ultraviolet (UV) radiation from the sun

CAUSES OF OZONE DEPLETION

- ▶ The Ozone Hole is caused by chemicals called CFCs, short for chlorofluorocarbons.
- ▶ Natural phenomena like Sun-spot and stratospheric winds.



A cartoon illustration of a sun with a face, looking angry or sad, next to a can of CFCs.

SOLUTIONS: PROTECTING THE OZONE LAYER

- ▶ CFC substitutes
- ▶ Advocates for ozone protection

