

Unit	Topic	Period															
			knowledge			Underst			Applicati			Higher			Total		
			V	S	L	V	S	L	V	S	L	V	S	L	V	S	L
1	Introduction of environment	6					1									1	
2	Ecology and ecosystem	11	1				1								1	1	
3	Natural resources and Biodiversity of Nepal	18	1			1					1				2		1
4	Environmental Pollution	18	1			1								1	2		1
5	Climate change and its effects	12	1				1	1		1					2	1	
6	Alternative Energy	9	1	1											1	1	
7	Environment and Sustainable Development	14		1									1			2	
8	Environment and Public Health	11				1									1	1	
9	Natural Disaster and its Management	12	1										1		1	1	
10	Environment Management	17	1					1	1						1		1
	Total	128	7	2		3	3	1	1	1	1		2	1	1	8	3

Specification Grid:

Types of questions	Total questions	Full marks
Very short questions	11	11 X 1 = 11
Short Questions	8	8 X 5 = 40
Long questions	3	3 X 8 = 24
Total	22	75

Notes:

- ❖ All questions are compulsory
- ❖ One extra (or question) will be asked from environmental pollution for long type answer.
- ❖ One extra (or question) each from ecology and ecosystem, environment and public health will be asked for short (answer type) question.

SYLLABUS: 2083
SYLLABUS: 2083
FIRST TERMINAL EXAMINATION

O. I Env. Sci.
OPT I ENVIRONMENT SCIENCE

Grade: 9
GRADE: 9

Unit	Topic	Period	Teaching methods	Evaluation, techniques and tool
1	Introduction to environment 1.1 Concept of Environment	6	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
2	Ecology and Ecosystem 2.1 Concept and Importance of Ecology and Ecosystem	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
3	Natural Resources and biodiversity of Nepal 3.1 Introduction and Types of Natural Resources 3.2 Status, Importance, Conservation measures of water resources	7	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
4	Environmental Pollution 4.1 Concept of environmental pollution and pollutants	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
5	Climate change and its effects 5.1 Concept of weather and Climate 5.2 Causes of weather and Climate change	6	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
6	Alternative Energy 6.1 Concept and Importance of alternative energy	5	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
7	Environment and Sustainable development 7.1 Introduction of Sustainable development and its needs	6	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
8	Environmental Health 8.1 Introduction and importance of environmental health	5	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
9	Natural disaster and disaster Management 9.1 Basic Concept and Introduction of Natural disaster 9.2 Types of Hazards	6	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
10	Environmental Management 10.1 Concept and Importance of Environmental management 10.2 Role of Individual in Environmental management	8	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
	Revision-5 days	57		

SYLLABUS: 2083
SYLLABUS: 2083
MID TERMINAL EXAMINATION

O. I Env. Sci.
OPT I ENVIRONMENT SCIENCE

Grade: 9
GRADE: 9

Unit	Topic	Period	Teaching methods	Evaluation, techniques and tool
1	Introduction to Environment 1.2 Importance of environment 1.3 Environmental Components	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
2	Ecology and Ecosystem 2.2 Components of Ecosystem 2.3 Types of Ecosystem with examples	7	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
3	Natural Resources and Biodiversity in Nepal 3.3 Status, Importance and Conservation measure of soil Resources 3.4 mineral resource	9	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
4	Environmental Pollution 4.2 Types and sources of environmental pollution	7	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
5	Climate change and its effects 5.3 Effects of Climate Change	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
6	Alternative Energy 6.2 Types of alternative energy 6.3 Status of alternative energy	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
7	Environment and Sustainable Development 7.2 Concept of carrying capacity of Earth and ways to maintain it	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
8	Environmental health 8.2 Relationship between environment and health	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
9	Natural disaster and Disaster management 9.3 Causes and Effects of natural disasters	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
10	Environment Management 10.3 Role of family, community in Environment Management	5	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
	Revision-3 days	52		

SECOND TERMINAL EXAMINATION

Unit	Topic	Period	Teaching methods	Evaluation, techniques and tool
1	Introduction to environment 1.3 Introduction and Importance of environmental science	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
2	Ecology and Ecosystem 2.4 Tropic level in ecosystem 2.5 Ecological Pyramid	5	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
3	Natural Resources and Biodiversity in Nepal 3.5 Status, Importance of Forest 3.6 Causes and Effects of Deforestation	7	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
4	Environment Pollution 4.3 Indoor and Outdoor pollution	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
5	Climate change and its effects 5.4 Effects of Global warning	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
6	Alternative Energy 6.4 Effects of lack of energy conservation	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
7	Environment and Sustainable development 7.3 Environment friendly lifestyle	5	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
8	Environmental Health 8.3 Characteristics of Healthy habitat	2	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
9	Natural disaster and disaster management 9.4 Preparedness, Mitigation of natural disasters	6	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
10	Environment management 10.4 Role of local body in Environment management	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
	Revision-6 days	40		

Unit	Topic	Period	Teaching methods	Evaluation, techniques and tool
1	Introduction to environment Revision	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
2	Ecology and Ecosystem 2.6 Food chain and Food web	5	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
3	Natural Resources and Biodiversity in Nepal 3.6 Conservation measures of water resources 3.7 Soil Formation Process 3.8 soil erosion causes and effects	8	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
4	Environment Pollution 4.4 Water Purification and its methods	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
5	Climate change and its effects 5.5 Measures to control global warming	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
6	Alternative Energy 6.5 Energy Conservation	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
7	Environment and Sustainable development 7.4 Use of Environment Friendly Technologies for Sustainable Development	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
8	Environmental Health -Effects of unhealthy Environment	3	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
9	Natural disaster and disaster management 9.5 Management of Natural Disasters	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
10	Environment management 10.5 Environment Friendly Indicators	4	Explanation, Field visit, Class discussion	Exercise as per text, Group Discussion, Project Work, Unit Test
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