

05. TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2068 Bhadra

Exam.	Regular / Back		
	Level	BE	Full Marks 40
Programme	BCE	Pass Marks 16	
Year / Part	IV / II	Time	1½ hrs.

Subject: - Technology, Environment and Society

- ✓ Candidates are required to give their answers in their own words as far as practicable.
 - ✓ Attempt All questions.
 - ✓ The figures in the margin indicate Full Marks.
 - ✓ Assume suitable data if necessary.
1. Discuss briefly the characteristics of information society. Justify how the information can play a major role as a source of knowledge and power in the modern era?
 2. Describe briefly the difference in impact of early industrial revolution of 1660 - 1815 AD and revolution of 1815 - 1918 AD.
 3. What are the factors contributing to the global climate change? Explain briefly the international efforts towards mitigation of climate change impact.
 4. Describe how the disposal of sludge and industrial waste results in pollution of river, lakes and canals? Recommend appropriate mitigation measures to minimize the impacts.
 5. Discuss the characteristics of technology. Describe how the technological innovations can unmask old social problems.
 6. Note down all the important environmental issues pertaining to Nepal. Describe briefly the corrective interventions required.

TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2077 Chaitra

Exam.	Regular		
Level	BE	Full Marks	40
Programme	BCE, BGE	Pass Marks	16
Year / Part	IV / II	Time	1 ½ hrs.

Subject: - Technology Environment and Society (CE 753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

1. Define appropriate technology with suitable examples. Also, describe how technology helps create opportunity while transforming a society. [2+6]
2. Discuss about the LEP development approach with both merits and demerits. [8]
3. a) Describe in brief about the "Great Renaissance of Europe" with key features. [4]
b) Discuss briefly on the Global Environmental issues and its driving force. [4]
4. Explain the reason of air and water pollution in the Kathmandu valley with its major mitigation measures. [4+4]
5. Write short notes on: (Any Two) [2×4]
 - a) Bio-gas and its suitability in Terai Region of Nepal
 - b) Climate Change and International Efforts
 - c) Deforestation and its consequences

Exam.	Regular		
Level	BE	Full Marks	40
Programme	BCE, BGE	Pass Marks	16
Year / Part	IV / II	Time	1 ½ hrs.

Subject: - Technology Environment and Society (CE753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
 - ✓ Attempt All questions.
 - ✓ All questions carry equal marks.
 - ✓ Assume suitable data if necessary.
1. What do you mean by Resource Mapping? Discuss about participatory approach for community management.
 2. What are appropriate technologies? How are they useful in least developed countries like Nepal? Justify with suitable examples.
 3. What is air pollution? What are the causes, impacts and mitigation measures of air pollution?
 4. What are the factors contributing to the climate change? Explain briefly the international efforts towards mitigation measures undertaken globally.
 5. How technology can control the price of basic commodities? Explain.

Examination Control Division
2074 Bhadra

Exam.	Regular		
Level	BE	Full Marks	40
Programme	BCE, BGE	Pass Marks	16
Year / Part	IV / II	Time	1 ½ hrs.

Subject: - Technology Environment and Society (CE753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ All questions carry equal marks.
- ✓ Assume suitable data if necessary.

1. What are the elements for the sustainable development? How can you say Indigenous technology are sustainable in case of Nepal?
2. Discuss about the major environmental issues of Nepal. How can we reduce air pollution of Kathmandu?
3. What are the primary reasons for human interventions in the ecosystem?
4. Describe causes and Impacts of climate change. How can we protect our National Parks and Conservation Areas .
5. How do you describe the LEP Approach for the development of Nepal? Explain advantages and disadvantages of LEP Approach.

04 TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2073 Magh

Exam.	New Back (2066 & Later Batch)		
Level	BE	Full Marks	40
Programme	BCE, BGE	Pass Marks	16
Year / Part	IV / II	Time	1 ½ hrs.

Subject: - Technology Environment and Society (CE 753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ All questions carry equal marks.
- ✓ Assume suitable data if necessary.

1. What are the elements for the sustainable development? How can you say Indigenous technology are sustainable?
2. What do you mean by climate change? Write major symptoms of climate changes in Nepal. State some international efforts for mitigation and adaptation of climate change induced problems.
3. Define environment and ecosystem? Describe how the disposal of sludge and industrial waste results in pollution of river, lakes and canals? Recommended appropriate mitigation measures to minimize the impacts.
4. Describe the major changes the industrial Revolution brought to human civilization.
5. How do you describe the LEP Approach for the development of Nepal? Explain advantages and disadvantages of LEP Approach.

Examination Control Division**2073 Bhadra**

Exam.	Regular		
Level	BE	Full Marks	40
Programme	BCE, BGE	Pass Marks	16
Year / Part	IV / II	Time	1 ½ hrs.

Subject: - Technology Environment and Society (CE753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt any ***Five*** questions.
- ✓ ***All*** questions carry equal marks.
- ✓ Assume suitable data if necessary.

1. What is appropriate technology? How technological advancement places impact on environment and society? Describe briefly the characteristics of information society.
2. What are the sources, causes and impacts of air pollution? Discuss about the importance of health education.
3. Discuss about the climate change and adaptation measure from Nepalese perspective.
4. Discuss the role of an engineer in community development.
5. Explain the technology provides shift in employment.
6. What is organic pollution in water? Discuss in detail aerobic digestion and anaerobic digestion with practical examples.

04 TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2072 Ashwin

Exam.	Regular		
Level	BE	Full Marks	40
Programme	BCE	Pass Marks	16
Year / Part	IV / II	Time	1 ½ hrs.

Subject: - Technology, Environment and Society (CE753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
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- ✓ Assume suitable data if necessary.

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1. What do you mean by technology? Write down benefits of technology in education sector.
2. Describe the LEP Approach for the development of Nepal? Explain community empowerment process of LEP Approach.
3. What are the primary reasons for human interventions in the ecosystem? How natural resources of ecosystem is converted into wealth?
4. What are the factors contributing to global warming? Outline their sources, impacts and mitigation measures of global warming.
5. Discuss the major environmental issues of Nepal? What are the causes of acid rain?

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Subject: - Technology, Environment and Society (CE753)

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- ✓ Attempt All questions.
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1. ✓ Define technology and its impact on societies. Define appropriate technology and its relevancy to LDC. [8]
2. ✓ Write down in detail causes, effects and mitigation measures of air pollution. [8]
3. ✓ a) Discuss LEP approach in infrastructure development. [4]
b) Discuss the role of Engineer in Community Management. [4]
4. ✓ What is climate change? Write down its probable impacts and problems mitigation measures that Nepal can adopt. [6]
5. ✓ Differentiate between renewable and non-renewable energy. [5]
6. Discuss intellectual revival of Europe in 13 to 15 century. [5]

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- ✓ Attempt All questions.
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1. What is "Agricultural Age", "Industrial Age" and "Information Age"? Explain. Write the positive as well as negative impact of technology on society. [4+4]
2. Describe briefly the impact of early part of industrial revolution. Describe the impact of World War I and II in our society. [3+5]
3. How participatory approach encourage to empowerment community in development activity? Write some key features of infrastructure development policies of Nepal. [2+6]
4. Define ecosystem and ecology. How increasing population disturbs to natural ecosystem and how to minimize this disturbance? List out the major environmental issues of Nepal. [2+3+3]

OR

What are the sources of Air and Water Pollution? Write some mitigation measures of water and air pollution? [4+4]

5. What is climate change? Describe its impacts and potential mitigation measures. Also describe international efforts made to address this problem. [1+4+3]

Exam.	New Back (2066 & Later Batch)		
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Programme	BCE	Pass Marks	16
Year / Part	IV / II	Time	1½ hrs.

Subject: - Technology Environment and Society (CE753)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

1. What is meant by industrial and information society? Discuss the impacts of computer and cybernetics in creating information society that makes the whole world as a global village. [8]
2. State the different ages of human development. Write the key developments on technology during first and Second World War and their positive and negative impact on population. [3+5]
3. What are the different key features of infrastructure development policies of Nepal? Do participatory approaches empower community, justify your answer. [3+5]
4. Define environment and ecosystem. Describe how the disposal of sludge and industrial waste results in pollution of river, lakes and canals? Recommended appropriate mitigation measures to minimize the impacts. [8]
5. What do you mean by climate change? Write major symptoms of climate changes in Nepal. State some national and international efforts for mitigation and adaption of climate induced problems. [1+4+3]

05 TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2069 Bhadra

Exam.	Regular / Back		
Level.	BE	Full Marks	40
Programme	BCE	Pass Marks	16
Year / Part	IV / II	Time	1½ hrs.

Subject: - Technology, Environment and Society (EG767CE)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
 - ✓ Attempt any **Five** questions.
 - ✓ **All** questions carry equal marks.
 - ✓ Assume suitable data if necessary.
1. Define industrial revolution, industrial society and information society. Also discuss about the transformation from industrial to information society.
 2. Describe about the industrial wastewater and its treatment methods. And, list out the major causes of polluting Bagmati River in Kathmandu.
 3. "Technology can control price" Do you agree with this statement. Support your views with examples.
 4. How Nepalese society is impacted by technology in course of time? What is the major environmental problem of Nepal?
 5. What is climate change? Describe its impacts and potential mitigation measures. Also describe international efforts made to address this problem
 6. Write short notes on: (any two)
 - a) Ecology, ecosystem and its characteristics
 - b) Technology and shift in employment
 - c) Air pollution, pollutant, its impacts and control measures
 - d) Acid rain, its impacts and control measures

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Subject: - Technology, Environment and Society

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 - ✓ Attempt All questions.
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1. Discuss briefly the characteristics of information society. Justify how the information can play a major role as a source of knowledge and power in the modern era?
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 4. Describe how the disposal of sludge and industrial waste results in pollution of river, lakes and canals? Recommend appropriate mitigation measures to minimize the impacts.
 5. Discuss the characteristics of technology. Describe how the technological innovations can unmask old social problems.
 6. Note down all the important environmental issues pertaining to Nepal. Describe briefly the corrective interventions required.

05 TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2066 Magh

Exam.	Regular/Back		
Level	BE	Full Marks	40
Programme	BCE	Pass Marks	16
Year / Part	IV / II	Time	1½ hrs.

Subject: - Technology, Environment and Society

- ✓ Candidates are required to give their answers in their own words as far as practicable.
 - ✓ Attempt any Five questions.
 - ✓ All questions carry equal marks.
 - ✓ Assume suitable data if necessary.
1. Do you agree that "Technology can control price"? Support your views with examples.
 2. Describe the impact of technology on employment. Justify the educational needs to accommodate new type of employment.
 3. Describe about the industrial waste and its management. Why this type of waste needs special treatment as compared to other wastes. Explain.
 4. What is climate change? Describe the possible intervention to reduce its impacts.
 5. Describe about the technological development from Stone Age to modern era and its impact on environment and society in the respective periods.
 6. Write short notes on: (any two)
 - a) Status of water pollution in Nepal
 - b) Pros and cons of technology
 - c) Appropriate technology

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Subject: - Technology, Environment and Society

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt any ***Five*** questions.
- ✓ ***All*** questions carry equal marks.
- ✓ Assume suitable data if necessary.

1. What is meant by information society? Discuss how information age can affect social life.
2. List out the development strategies and discuss their relevancy in the development process of Nepal.
3. Discuss how the technological innovations reveal social problems. Also mention the pros and cons of technological development.
4. Describe about the regional and global environmental issues. Explain, which one is the most burning issues in the present context and why?
5. Describe how the industrial wastewater and emission degrade the quality of aquatic and terrestrial ecosystems. Also recommend the preventive measures to minimize their impacts.
6. What are the key national environmental issues of Nepal? Recommend potential preventive measures to minimize the impact of solid waste in urban area of Nepal.

03

TRIBHUVAN UNIVERSITY

INSTITUTE OF ENGINEERING

Examination Control Division

2065 Baishakh

Exam.	Back		
Level	BE	Full Marks	40
Programme	BCE	Pass Marks	16
Year / Part	IV / II	Time	1½ hrs.

Subject: - Technology, Environment and Society

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt any **Five** questions.
- ✓ **All** questions carry equal marks.
- ✓ Assume suitable data if necessary.

1. What is Industrial Revolution? Describe the major changes it brought to human civilization.
2. What can be the feasible solutions to control human disturbances to ecosystem? Give your options.
3. Present your arguments in favor of the statement that "Technology is a curse".
4. Discuss the importance of technology in controlling prices.
5. Discuss about the challenges on controlling acid rain.
6. Discuss about the impact of technology in Nepalese society.
