



# Indian Institute of Information Technology Vadodara

End semester, Autumn/ Winter examination  
B.Tech/ M.Tech/ Research student  
(Strike off non applicable)

Course Code: SC201 Course Name: Environmental Science Date: January 3, 2022

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Number of Supplementary booklets:-- 1/2/3

Question No.	Marks
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I shall abide by rules and regulation of Institute. I affirm that I will not take any unauthorized help during exam.

Student's Signature

Archit Agrawal

Information Verified

Invigilator's Signature

Rajesh

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## frst formal

1. The National Action Plan on Climate Change was launched in 2008 by the Prime Minister's Council on Climate Change (PMCC).

In order to achieve a sustainable development path that advances economic and environmental objectives simultaneously, the NAPCC is guided by several principles few of which are mentioned below:

### Few principles of NAPCC:

- Protecting the poor and vulnerable sections of society through an inclusive and sustainable development strategy, sensitive to climate change.
- Devising efficient and cost-effective strategies for end use Demand Side Management.
- Engineering new and innovative forms of market, regulatory and voluntary mechanisms to promote sustainable development.
- Welcoming international cooperation for research and development.



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Amit Prasad

The NAPCC identifies measures that promote our development objectives while also yielding co-benefits for addressing climate change effectively.

It describes eight missions that deals with climate change adaptation and mitigation.

Eight Missions of NAPCC:

- National Mission for Enhanced Energy Efficiency
- National Solar Mission
- National Mission for Sustainable Habitat
- National Water Mission
- National Mission for Strategic Knowledge on Climate Change
- National Mission for Sustainable Agriculture
- National Mission for Green India
- National Mission for Sustaining the Himalayan Ecosystem

These national missions will be institutionalized by respective ministries and will be organized through inter-sectoral groups which include related Ministries, Ministry of Finance and the Planning Commission, experts from industry, academia and civil society.

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## Audit for annual

Several Key Achievements under NAPCC are:

- National Solar Mission: A cumulative capacity of 24,567 W has been installed till Nov 30, 2018; 194,700 solar pumps set up till August 2019; 45 solar parks in 21 states with an aggregate capacity of 2,6500 MW sanctioned.
- Six thematic task forces and 11 state climate change cells have been set up to facilitate climate change action in Himalayan states.
- State climate change centers have been set up in 10 states; global technology watch groups have been set up in eight different sectors.

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Final Exam

2: In the past two decades, the global market of electrical and electronic equipment (EEE) has grown exponentially. The introduction of new and innovative designs, new technologies, smart functioning has escalated the usage of electrical devices. India, today, is burdened with enormous amount of E-waste generated domestically or imported illegally. Moreover, the reduced lifetime of new devices results in increasing amount of E-waste.

India lacks a comprehensive regulation dealing with E-waste management. E-waste policy development may require a more customized approach where instead of addressing E-waste in isolation it should be addressed as a part of national development agenda.

## Various Stakeholders In E-waste management System in India

### • Informal Sector Stakeholders

India's E-waste recycling industry is dominated by the so-called informal sector where tens of thousands of people are estimated to make their living from material recovery. Currently, in India,

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## Market Appraisal

there are over 2000 units engaged in informal sector for E-waste recycling!

Stakeholders in the informal sector include IT industries, public and private sector establishments - hospitals, research and educational institutes, business and corporate houses, individual household which are chiefly responsible for generation of E-waste.

E-waste generated by them is passed to another set of stakeholders ~~in~~ in the form of ragpickers, scrap dealers, wholesalers, recyclers etc. for management purpose who primarily carry out major operations such as collection, segregation, disassembly and dismantling.

### • Formal Sector Stakeholders

The authorized E-waste recycling facilities in India capture only 2% of total E-waste generated.

The stakeholders in the formal sector mostly include producers of EEE's who run service centres and/or take back schemes in India, and the companies-institutional users of EEE's - who have an environmental management system (EMS) or environmental policies on disposal of E-waste.

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3. Awareness of climate change as an issue facing mankind, and action to address it, are relatively new phenomena.

It was not until the late 1970's that the World Meteorological Organisation (WMO) began to express the concern that human activities might lead to serious issues for life on Earth.

Scientific concerns about global warming grew during 1980's and in 1988, the WMO and the United Nations Environment Programme (UNEP) established the International Panel on Climate Change (IPCC) to investigate and report on scientific evidence on climate change.

The IPCC has been central to subsequent debates and processes around the development of climate change policies. Its first assessment report (in 1990) fed into the drafting of United Nations Framework Convention on Climate Change (UNFCCC). In 1991, this was signed by 166 nations at the Earth Summit in 1992 in Rio de Janeiro.

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The UNFCCC did not contain any specific targets to reduce greenhouse gas emissions.

In the absence of specific targets, the UNFCCC fell short of the aspirations of many environmentalists. However, it was an important step in establishing foundational principles to guide subsequent negotiations over reduction in GHG emissions. These culminated in a Conference of Parties (COP) meeting in Kyoto, Japan in 1997.

This was the third COP meeting where delegates agreed to what is known as the Kyoto Protocol. This established developed country emissions targets for 2008 - 2012 and three main mechanisms for meeting them:

- i) Emission Trading Scheme (ETS)
- ii) Clean Development Mechanism (CDM)
- iii) Joint Implementation

However, a number of countries subsequently refused to ratify the Kyoto agreement, arguing that developing countries also need to limit their emissions.

COP meetings took place in Copenhagen in 2009, Cancún in 2010 and Durban in 2011, when negotiations were ongoing for establishment of a legally binding treaty.