e-WASTE MANAGEMENT POLICY

CENTRAL SANSKRIT UNIVERSITY
(Established by an Act of Parliament, 2020)
[Under Ministry of Education, Govt. of India]
New Delhi – 110 058

डॉ. मंथा श्रीनिवासु/Dr. Mantha Srinivasu
परियोजना अधिकारी/Project Officer
केन्द्रीय संस्कृत विश्वविद्यालय
Central Sanskrit University
शिक्षा मन्त्रालय, भारत सरकार के अधीन
Under Ministry of Education, Govt. of India
56-57, संस्थागत क्षेत्र, जनकपुरी, नई दिल्ली - 110058
56-57, Institutional Area, Janakpuri, New Delhi - 110058

10. 11. 2022
Prof. Ranjit Kumar Barman
Registrar (I/c)
Central Sanskrit University
56-57, Institutional Area,
Janakpuri, New Delhi - 110058

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1. INTRODUCTION :

Waste is an outcome of product or a substance that is no longer suited for its intended use. Electronic waste also known as E-Waste or WEEE (Waste electrical and electronic equipment) comprises of a broad and growing range of electronic devices, ranging from large household devices such as refrigerators, electric motors, voltage stabilizers, air conditioners, cell phones, personal stereos, Television, LED's, CRT's, Computer systems and other consumer electronics which have outlived their lives and have been discarded by the users.

Robinson 2009 defines E-Waste as "any device connected to a power source that no longer satisfies the current owner to the purpose for which it was created", such as computer, television, cellphones, refrigerator and ovens. With the presence of deadly chemicals and toxic substances in the electronic gadgets, disposal of E-Waste is becoming an environmental and health nightmare. Globally only 15 – 20 percent of E-Waste is recycled while the rest is dumped into developing countries such as India, and China.

Table 1: Composition of E-waste

S.No.	Material	Element	Percentage
1.	Ferrous metals	Iron and Steel	36
2.	Non-ferrous metals	Aluminium, Copper, Lead, Cadmium,Mercury, Gold, Silver, Palladium, Indium, Arsenic, Selenium	19
3.	Plastics	Brominated and Non-brominated Plastic	23
4.	Glass	Lead glass and Normal glass	15
5.	Other	-	7
Source: http://ewasteguide.info/e-waste-composition			

The demand for electronic and electrical equipment (EEE) has been on the increase in the last decade as a result of accelerated economic growth, coupled with urbanization around the world. The useful life of electrical and electronic equipment (EEE) has been shortened because of the advancement in technology and change in consumer patterns. This has resulted in the generation of large quantities of electronic waste (e-waste) that needs to be managed. The handling of e-waste including combustion in incinerators, disposing inlandfill, or exporting overseas is no longer permitted without isolating the hazardous materials dueto environmental pollution and global legislations.

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Central Sanskrit University, New Delhi makes use of a wide range of electronic and electrical equipment's owing to the different faculties in campuses resulting in the generation of huge amount of e-waste. All the campuses have well established Computer laboratories with hundreds of Computer Systems and allied peripherals. Moreover, entire universityfaculty and staff in administration, technical and finance use computers for carrying out their day-to-day functioning. The obsolescence rate of the IECT Equipment is 3-5 years and thereforemust be discarded and replaced by new devices. Thus, there is prime need of a E-waste management in the University, which would ensure the disposal of these obsolete IECT equipment's, as per the approved guidelines by the Govt. of India. Establishment of e-waste management infrastructure, awareness and education, and human resource development resource mobilization are some of the key strategies encompassed by this policy document.

2. POLICY STATEMENT

The University will adopt the principles of the 'best practicable environmental option' in the delivery of its waste management services. The University will apply a 'waste hierarchical approach', to reduce, reuse, recycle and recover waste products in preference to the disposal of waste to landfill. The University recognizes the importance of meeting these legal requirements and to manage its waste responsibly, reduce the volume of waste sent to landfill and to sensitize reuse and recycling wherever possible. The University requires all the teaching and non-teaching staff, students, guests and anyone else making use of the premises to comply with this Policy and associated "University Environmental Guidance" to ensure compliance with all waste legislations. Any E-waste generated in the campus shall be managed and handled in accordance with the compliance criteria and the procedure laid down in E-waste (Management & Handling) Rules under the Environment Protection Act 2016 and E-Waste (Management) Amendment Rules, 2018.There is a legal requirement for all who produce, keep or dispose hazardous/radioactive waste/chemical waste of any type to comply with the various regulations under national and international environmental protection legislation.

3. OBJECTIVES OF THE POLICY

In developing this e-waste policy, CSU seeks to meet the following objectives:
i.   To minimize generation of e-waste at source and facilitate repair, reuse, and recycling wherever possible, over the disposal of wastes in a cost-effective manner.
ii.   To mobilize and sensitize stakeholders on the proper management and handling of e-waste on a sustainable basis.
iii.   To ensure the safe handling and storage of wastes in university campuses.
iv.   To encourage use of environmentally sound e-waste recycling methods.
v.   To provide guidance on the standards of electronic equipment that is implemented in the University.
vi.   To provide appropriate training for teacher, resident, staff, students, and other stakeholders on waste management issues.

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4. SCOPE OF THE POLICY

This Policy is formed to be applicable in the University campuses and covers all electronic equipment and devices and e-waste management operations on e-waste resulting from activitiesof staff and students within the University.

5. E-WASTE POLICY GUIDELINES

I. Considering the negative impacts of the improper disposal of e-waste and need to implement an effective e-waste management system in the University. There are onlytwo e-waste disposal methods at hand with the University, namely:

   i)   store at the warehouse and
   ii) hand over to e-waste collectors as identified by the Government

   The following recommendations are offered regarding the above suggestion:

   a)   the University should sponsor seminars regarding proper e-waste management and disposal for students, faculty and staff.
   b)   Teachers are encouraged to inculcate positive values to their students in terms of caring for the environment through propere-waste disposal.
   c)   the University administration may also consider the implementation of the proposed e-waste inventory management system to further improve the current practices in the University, making it more responsive tothe challenges of today.

II. Central Sanskrit University endeavors to ensure environmentally sound management of e-waste. Environmentally sound recycling refers to recycling without leading to adverse impact on environment and health. The use of environmentally sound technologies needs to be encouraged to increase efficiency in processes, sensitize recovery materials and conserve energy, thus reducingwaste generation. The policy shall enable access to such technologies and make the informal stakeholders accountable.

   Environmentally sound e-waste management shall be achieved through the following measures:

   1) E-waste sound recycling in campuses of CSU.
   2) Ensure use of environmentally sound technologies to maximize recovery and minimize waste generation.
   3) Appropriate technologies for recycling to be sourced/developed.
   4) Training and skills development to be encouraged for using environmentally safe operations in handling e-waste.
   5) The need to dispose e-waste in manner that is safe and sound withrespect to its staff, students, and Institutional operations. The need to establish clear guidelines on e-waste management.

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6. E-Waste Policy Implementation Plan

6.1. Apex level Advisory Committee

      The university shall have an E-waste apex level advisory committee to implement above mentioned policy under the chairmanship of Vice Chancellor or Chairman, nominated by the Vice Chancellor.

The e-waste apex level advisory committee shall be comprising of faculty, staff and students that shall:

1) Oversee implementation of this policy.
2) Develop procedures and work instructions for maintaining record of e-waste, along with collection, sorting, dis-assembly, packaging, storage and disposal of e-waste.
3) Minimize the unintended consequences due to e-waste handling.
4) Encourage decisions consistent with the national policies.
5) Provide flexibility to adopt the changes required from time to time.
6) Review inputs from all stakeholders.
7) Monitor the implementation of this policy and advise university management as appropriate.
8) Advise review/improvement of this policy from time to time.

6.2 E-Waste Management forum of students

The University shall constitute an e-waste management forum of students which shallorganize:

1) Quarterly awareness forums for sensitization of students on e-waste.
2) Quarterly voluntary surrender e-waste to the university.

The forum activities shall be coordinated by Director of Campus(es).

6.3 E-Waste disposal committee

The University shall constitute an e-waste disposal committee which shall be responsible for :

1) Ensure that e-waste is collected every quarter and kept in an appropriate storage, pending the recommendations/approval of recommendations of Disposal Committee.
2) Profile all e-waste generated at least once every quarter and prepare including recommendations of disposal.
3) Execute the recommendations of Disposal Committee and prepare a yearly report for the University Management.

The e-Waste Disposal Committee shall be constituted as following:

University (H.Q.) Level	Committee	Campus Level
Registrar	*Chairman*	Director
Dean (Academics)	*Member*	Sr. Professor
Finance Officer	*Member*	Section Officer
D.D. (Admn.)	*Member*	Assistant
Project Officer	*Member-Secretary*	Project Officer

6.4 Minimizing waste generation at source

Waste Minimization must be attempted first considering the waste management hierarchy plan.It will be mandatory on the part of the Head of the department to report changes/additions in hazardous waste generation and steps taken to reduce generation of waste per unit of production.As per the Hazardous Waste regulations, University can store hazardous waste for a period not exceeding 90 days and shall maintain a record of sale, transfer, storage, recycling and reprocessing of such wastes unless the concerned State Pollution Control Board has extended thestipulated period. The waste could either be recycled/reused or disposed of in captive or common treatment, storage and disposed facilities available in the campus or incinerated, as proposed in the waste hierarchy list (Reduce-Reuse-Recycle-Energy Recovery-Proper Disposal).

6.5 R-R-R (Reuse, Recovery and Recycling) of non-hazardous waste

University will explore options/opportunities of reusing, recovery, and recycling of nonhazardous waste in an environmentally sustainable manner. Paper waste will be recycled to make packing material. The toxic inks and dyes of the paper will be treated with enzyme technology, which is environmentally benign.

6.6 Setting up of disposal facility

For the waste which cannot be recycled/reused, safe and environmentally sound disposal will be adopted depending upon waste category.

1. All University electronic and electrical devices which have become obsolete shall be reportedto e-waste disposal committee as constituted by the committee. E-Waste disposal committee team shall pick up e-waste items from all Departments or sections. They shall categorize items for recycling purpose depending upon the status of the equipment. Items which have become obsolete and are of no use can be treated as scrap and can be handed over to government approved e-waste recyclers to generate some amount of revenue for the University.

2.The e-waste disposal team shall be responsible for record keeping and certification of disposal for all e-waste as per the recommendations.

7. Review Policy

The policy shall be reviewed after every five years or earlier, as need arises to check the effectiveness of the proposed E-Waste policy Management System in the University.

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