# **REPORTS ON ECO – CLUBS ACTIVITIES**

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# GITARATTAN INSTITUTE OF ADVANCED STUDIES & TRAINING

JANUARY'2 020 - SEPTEMBER' 2020



<u>Reports on Several</u> <u>Activities</u>





Eco Club



SECTOR 7D, ROHINI, DELHI – 110085 Ph: 011-27045607, 011-27045608 Email: <u>infogiast@gmail.com</u>

#### 1. Activities

- a) WATER RESOURCES
- b) MINIMISATION OF PLASTIC PACKAGES

### Date: <u>3<sup>rd</sup> January to 6<sup>th</sup> January'2020</u> Venue: **Multipurpose Hall**

Different activities were planned on different days from 3<sup>rd</sup> January to 6<sup>th</sup> January'2020 under the awareness programme for <u>Water conservation & resources and Minimization of</u> <u>plastic packages.</u>

The following are the activities that were conducted subsequently

**6<sup>th</sup>January'2020:** The event under the "**Eco-Club**" **activities**, the <u>Poster Making</u> <u>Competition</u> held on **6<sup>th</sup>January'2020** in the Campus Auditorium. Students participated actively in the competition and came up with vibrant and thoughtful pieces of art under Eco-Club Activities. Principal, Prof. Sonia Jindal graced the event and motivated the students. The event came as a reflection of how young minds perceive the issues utmost importance i.e. <u>Conservation of Water & Single Use of Plastic and How Keen they are to Make a</u> <u>Difference.</u>

The participants with their respective posters.



<u>7<sup>th</sup>January'2020:</u> During the Eco-Club activity, banners with water conservation and Ban on Plastic were displayed at different places in the institute's premises.



Display of Banners of Swachhta Pakhwada in the premises.

8<sup>th</sup> January' 2020: Banner Making Activity was followed by two Documentaries i.e.

- Paani ke Laane- water crisis in bundelkhand
- H2WOE-India's water crisis (A Warning to the World)

On importance of water organized for students on 8<sup>th</sup> January' 2020to motivates everyone to participate in the Eco Club activities with vigor. They must assume the responsibility in conservation of water and to spread the awareness.



 $9^{th}$ January'2020 : The GIAST further organized a Bulletin Board Decoration activity on  $9^{th}$ January'2020 to make everyone aware about the issues such as water conservation, effects of use of plastic, significance of water, rain water harvesting and 3R's of plastic etc. All the college students participated whole heartedly in the event and made the beautiful & informative boards on the theme of 'scarcity of water and harmful effects of use of plastic'.

(A) and (B): Teams after completion of bulletin board decoration activity.



<u>10<sup>th</sup> January'2020</u>: Succeeding the display of messages on bulletin board taken during the bulletin board decoration activity, the next step in the "Eco-Club activity" initiative came with the campus awareness drive that took place on <u>10<sup>th</sup> January'2020</u>: The students and members of faculty led by Dr.Shikha Ranjan, Associate Professor started the Campus Awareness Drive from the canteen area. The zealous students and teachers took vital efforts to display the posters in the campus premises as they displayed in multipurpose hall, ground area, corridors, putting up posters and also spread the awareness regarding harmful effects on the use of plastic and efficient utilization of water.

Students and teachers come together for Campus Awareness Drive.



### 2. <u>DEBATE ON AIR POLLUTION (stop open burning of garbage)</u>

## Date: <u>11<sup>th</sup> & 12<sup>th</sup> February'2020</u> Venue: **Multipurpose Hall**

<u>February'2020</u>: On 11.02.2020, the GIAST conducted Discussion on '<u>Stop open burning of</u> <u>Garbage'</u> at multipurpose hall of GIAST, where 20 students of B.Ed.  $1^{st}$  year participated enthusiastically and were divided into two groups under the supervision of Ms. D. Anupama.



<u>12<sup>th</sup>February'2020</u>: A mega Debate Competition was organized in college premises on  $12^{th}$ Februaruy'2020 wherein the students and staff of the college participated in large numbers on topic <u>'Air Pollution'</u>.

#### 3. AWARENESS ON YAMUNA RIVER / WATER CONSERVATION

Date: 10<sup>th</sup> March'2020 Venue: (ONLINE)

<u>10<sup>th</sup> March'2020</u>: The students of GIAST performed <u>a Nukkad Natak</u> to sensitize the students about the responsibility in <u>Conservation Of Water And Awareness On Yamuna River.</u>





## 4. POSTER & BORDER MAKING COMPETITION on Earth Day'

Date: 22<sup>nd</sup> April'2020 Venue: (ONLINE)

Poster Making and Border Making Competition organised on EARTH DAY held on **Thursday, 22 April** Online due to pandemic. Initially, the choice of theme was given to the students and everyone came up with unique ideas. However, later the theme was limited to only two alternatives. Those were:

- 1. Our Nation, Our Pride
- 2. Save Earth

The participants had to be in groups of ten. The venue of the competition was the online and the duration was approximately two hours. It was amazing to witness everyone enjoying the task. Each poster was as creative and beautiful as the other. Every border was eye-catching. In poster making competition, all two topics were equally utilised by the students as their respective themes. Some illustrated ' Effects of Pollution', 'Mission Indra Dhanush', 'Balance Diet and many more such topics. In border making too, the themes chosen were variant. The judges appreciated everyone which was heart-warming as well as inspiring. Everyone explained their theme very well. It was an amazing experience for every students as it was virtual competition.



#### Our Nation, Our Pride.

India is a land of great political leaders who ruled the country effectively and also by protecting its national interest. The objective of the competition was to address the feeling of patriotism among the students of our college who participated in the event with full zeal and love towards the mother land.



Whole event was organised on 22<sup>nd</sup> April, 2020 from 11:40 am to 1:10 am online. The students expressed their views and thoughts about the great leaders as well as on Independence Day by drawing, writing slogans and quotes. This activity kept the student engaged and it was organized to explore and encourage creativity in students and offer them a platform to showcase their skills. It inspired them to think and work creatively in order to promote artistic excellence.

All students participated earnestly in the competition. They came up with amazing creativity. Their efforts and initiative was appreciated by one and all.



# 5. <u>QUIZ COMPETITION ON BIODIVERSITY & WILDLIFE</u>

Date: 22<sup>nd</sup> May '2020 Venue: (ONLINE)

> <u>Conservation of wildlife through awareness</u> <u>- Wildlife Quiz competition</u>

The Objective type **Wildlife Quiz competition** was organised by GIAST on the Forest & Wildlife of India, North East India, to aware the students about "HOW TO CONSERVE WILDLIFE" Some questions are also set for Wildlife Protection Act 1972 (amended up-to 2006). Following **questions were asked** 

Tick the correct answer.

Q.1. Which Forest type is not found in Tamenglong District?(a) Bamboo Bract (b) Alpine Forest (c) Moist deciduous forest (d) Mixed evergreen Forest

Q.2.In which Habitat type; the species diversity is highest?(a) Desert (b) High altitude mountain (c) Grassland (d) Rain Forest

Q.3.Which country is the largest consumer of wildlife product for their traditional medicine? (a) Myanmar (b) Laos (c) Thailand (d) China

Q.4. Which Part of Rhinoceros is taken out for illegal trade? (a) Bone (b) Meat (c) Kidney (d) Horn

Q. 5.Which of the following primate is not an ape?(a) Hanuman langur (b) Chimpanzee (c) Orangutan (d) Hoolock gibbon.

Q. 6. The following statement is not true in respect of Hoolock gibbon (Hylobatus hoolock). (a) The male hoolock are black in colour and female hoolock are brownish in colour. (b) In India, Hoolock gibbon are found only in North East India (c) Hoolock gibbon are not found in Tamenglong District (d) The movement of hoolock gibbon in the top trees canopy by swinging with its arms is termed as "brachiation".

Q. 7.One of the following mammals is not found in Tamenglong District ?

(a) Serow (Sabeng) (b) Tiger (Royal Bengal tiger)

(c) Sambar (Sajal) (d) Musk deer (Kasturi)

Q.8. Which Protected Area of India is chosen for translocation of Asiatic Lion?(a) Kanha National Park in Madhya Pardesh (b) Kuno Palpo Sanctuary in Madhya Pardesh(c) Jim Corbett National Park in Uttarkhand (d) Tadoba National Park in Maharastra.

Q.9. Who is the Chairman of National Board for Wildlife?

(a) Forest & Environment Minister (b) Director, Project Tiger (c) Prime Minister (d) Director General of Forests, Ministry of Environment & Forests.

Q.10. In Asia only one Protected Area is the only home of Asiatic Lion (Panthera leo persica). Name the Protected Area.

(a) Kanha National Park (b) Sariska National Park

(c) Ranthambore National Park (d) Gir National Park.

Q.11. In the World, it is the only floating National Park. Name the park.

(a) Kanha National Park (b) Kaziranga National Park

(c) Keibul Lamjao National Park (d) Sunderban National Park.

Q. 12. Which State is known as "Falcon Capital of the world"?

(a) Mizoram (b) Gujarat (c) Manipur (d) Nagaland

Q.13. Which animal is known as "the only Indian Ape"?(a) Hanuman Langur (b) Hoolock gibbon (c ) Phayre's leaf monkey (d) Lion Tailed macaque

Q. 14.Which District of Manipur is the home of Dzuko Lily (Lilium chitrangadae)? (a) Ukhrul (b) Churchandpur (c) Senapati (d)Tamenglong.

Q. 15. Who is the Chairman of State Board for Wildlife?(a) Forest & Environment Minister (b) Director, Project Tiger (c) Prime Minister (d) Chief Minister

Q.16. There are two World Natural Heritage Sites in one of the State of North East India.Name the State.(a) Meghalaya (b) Arunachal Pradesh (c) Manipur (d) Assam

Q.17 Which District of Manipur is the home of State Bird (Nongin), State Tree (Uningthou) & State Flower (Shiroi Lily)?

(a) Ukhrul (b) Churchandpur (c) Senapati (d)Tamenglong.

Q. 18 Which of the following Wildlife Sanctuary (proposed) is not in Tamenglong District ? (a) Jiri-Makru Wildlife Sanctuary (b) Zeilad (Zeilat) Wildlife Sanctuary (c) Keilam Wildlife Sanctuary (d) Bunning (Puilong) Wildlife Sanctuary.

# 6. HOLIDAY HOMEWORK REGARDING LATEST ENVIRONMENTAL ISSUES

Date: 5<sup>th</sup> June' 2020 Venue: Holiday Homework (Essay Writing Competition)

Essay Writing Competition on the topic "Latest Environmental Issues" was conducted by the GIAST for all the students to make them vigilant about the latest Environmental Issues.

#### 7. TALKS/ SEMINAR/ WORKSHOPS ON NOISE POLLUTION

Extension Lecture on Environmental Issues ("Bio-medical waste management")

Date: 5<sup>th</sup> August'2020 Venue: (ONLINE)

It is said that Rome was not built in a day. Similarly, Extension was not master-minded by one individual; rather it evolved through hard work of extension professionals around the world over more than a century.

Keeping in vision the teaching-learning process there are many topics and issues in each discipline which require some other experts specializing in the field for the particular issue. This evolves the idea of an extension lecture to be scheduled considering the need of students as well as teacher educators. The Extension Lecture Series have been visualized to motivate the young children from schools and colleges to go for higher studies of their choice. The teacher-education institutes are not an exception and there also extension lectures are organised for the growth of student-teachers and teacher-educators.

In this vision an extension lecture was organized by GIAST on 5<sup>th</sup>August'2020 on the topic "Bio-Medical waste Management".The resource person invited to speak on the above topic was Ms D. Anupama, Head of School, Gitarattan Jindal Public School, Rohini.

Ms D Anupama, defined what is bio-medical waste and how it can be managed to keep environment free from its hazards. She mentioned and explained that Biomedical waste management has recently emerged as an issue of major concern not only to hospitals, nursing home authorities but also to the environment. The bio-medical wastes generated from health care units depend upon a number of factors such as waste management methods, type of health care units, occupancy of healthcare units, specialization of healthcare units, ratio of reusable items in use, availability of infrastructure and resources etc.

The proper management of biomedical waste has become a worldwide humanitarian topic today. Although, hazards of poor management of biomedical waste have aroused the concern world over, especially in the light of its far-reaching effects on health and the environment.

She further explained that now it is a well-established fact that there are many adverse and harmful effects to the environment including human beings which are caused by the "Hospital waste" generated during the patient care. Hospital waste is a potential health hazard to the health care workers, public and flora and fauna of the area. The problems of the waste disposal in the hospitals and other health-care institutions have become issues of increasing concern. Ms D Anupama also classified the bio-medical waste which is as follows:

#### **Classification of Bio-Medical Waste**

The World Health Organization (WHO) has classified medical waste into eight categories:

- General Waste
- Pathological
- Radioactive
- Chemical
- Infectious to potentially infectious waste
- Sharps
- Pharmaceuticals
- Pressurized containers

After discussing about the types of waste, she talked about the sources from which this waste is produced in the environment classifying them into two types- major sources and minor sources which are as follows:

#### Sources of Biomedical Waste

Hospitals produce waste, which is increasing over the years in its amount and type. The

hospital waste, in addition to the risk for patients and personnel who handle them, also poses a threat to public health and environment.

#### **Major Sources**

- Govt. hospitals/private hospitals/nursing homes/ dispensaries.
- Primary health centers.
- Medical colleges and research centers/ paramedic services.
- Veterinary colleges and animal research centers.
- Blood banks/mortuaries/autopsy centers.
- Biotechnology institutions.
- Production units.

#### **Minor Sources**

- Physicians/ dentists' clinics
- Animal houses/slaughter houses.
- Blood donation camps.
- Vaccination centers.
- Acupuncturists/psychiatric clinics/cosmetic piercing.
- Funeral services.
- Institutions for disabled persons

Next, the problems relating to biomedical waste were discussed. A major issue related to current Bio-Medical waste management in many hospitals is that the implementation of Bio-Waste regulation is unsatisfactory as some hospitals are disposing the waste in a haphazard, improper and indiscriminate manner. Lack of segregation practices, results in mixing of hospital wastes with general waste making the whole waste stream hazardous. Inappropriate segregation ultimately results in an improper method of waste disposal which poses a big problem for the environment and human survival.

Inadequate Bio-Medical waste management thus will cause environmental pollution, unpleasant smell, growth and multiplication of vectors like insects, rodents and worms and may lead to the transmission of diseases like typhoid, cholera, hepatitis and AIDS through injuries from syringes and needles contaminated with human.

Various communicable diseases, which spread through water, sweat, blood, body fluids and contaminated organs, are important to be prevented. The Bio Medical Waste scattered in and around the hospitals invites flies, insects, rodents, cats and dogs that are responsible for the spread of communication disease like plague and rabies. Rag pickers in the hospital, sorting out the garbage are at a risk of getting tetanus and HIV infections. The recycling of disposable syringes, needles, IV sets and other article like glass bottles without proper sterilization are responsible for Hepatitis, HIV, and other viral diseases. It becomes primary responsibility of Health administrators to manage hospital waste in most safe and eco-friendly manner.

#### Need of Biomedical waste Management in Hospitals

The reasons due to which there is great need of management of hospitals waste such as:

- Injuries from sharps leading to infection to all categories of hospital personnel and waste handler.
- No socomial infections in patients from poor infection control practices and poor waste management.

- Risk of infection outside hospital for waste handlers and scavengers and at time general public living in the vicinity of hospitals.
- Risk associated with hazardous chemicals, drugs to persons handling wastes at all levels.
- "Disposable" being repacked and sold by unscrupulous elements without even being washed.
- Drugs which have been disposed of, being repacked and sold off to unsuspecting buyers.
- Risk of air, water and soil pollution directly due to waste, or due to defective incineration emissions and ash.

#### **Process of Biomedical Waste**

There is a big network of Health Care Institutions in India. The hospital waste like body parts, organs, tissues, blood and body fluids along with soiled linen, cotton, bandage and plaster casts from infected and contaminated areas are very essential to be properly collected, segregated, stored, transported, treated and disposed of in safe manner to prevent nosocomial or hospital acquired infection. The process follows the below given steps:

- Waste collection
- Segregation
- Transportation and storage
- Treatment & Disposal
- Transport to final disposal site
- Final disposal

#### **Biomedical Waste Treatment and Disposal**

Health care waste is a heterogeneous mixture, which is very difficult to manage as such. But the problem can be simplified and its dimension reduced considerably if a proper management system is planned.

#### **Incineration Technology**

This is a high temperature thermal process employing combustion of the waste under controlled condition for converting them into inert material and gases. Incinerators can be oil fired or electrically powered or a combination thereof. Broadly, three types of incinerators are used for hospital waste: multiple hearth type, rotary kiln and controlled air types. All the types can have primary and secondary combustion chambers to ensure optimal combustion. These are refractory lined.

#### **Non-Incineration Technology**

Non-incineration treatment includes four basic processes: thermal, chemical, irradiative, and biological. The majority of non-incineration technologies employ the thermal and chemical processes. The main purpose of the treatment technology is to decontaminate waste by destroying pathogens. Facilities should make certain that the technology could meet state criteria for disinfection.

#### Autoclaving

• The autoclave operates on the principle of the standard pressure cooker.

- The process involves using steam at high temperatures.
- The steam generated at high temperature penetrates waste material and kills all the micro organism
- These are also of three types: Gravity type, Pre-vacuum type and Retort type.
- Microwave Irradiation
- The microwave is based on the principle of generation of high frequency waves.
- These waves cause the particles within the waste material to vibrate, generating heat.
- This heat generated from within kills all pathogens.
- **Chemical Methods**: 1 % hypochlorite solution can be used for chemical disinfection.

She also talked about the color coding followed by the professionals on guidelines to dispose off the bio medical waste.

Colour Coding	Type of Container	Waste Category	Treatment options as per Schedule I
Yellow	Plastic bag	Cat.1,Cat.2, Cat.3 and Cat.6	Incineration/ deep burial
Red	Disinfected container/ plastic bag	Cat.3, Cat.6, and Cat.7	Autoclaving/Micro waving/ Chemical Treatment
Blue/ White Translucent	Plastic Bag/ puncture proof container	Cat.4 and Cat.7	Autoclaving/Micro waving/ Chemical Treatment and destruction/ shredding
Black	Plastic bag	Cat.5, Cat.9, and Cat.10 (solid)	Disposal in secured landfill

The extension lecture ended with a vote of thanks on the note that we must be careful about hazardous waste around us and should act as responsible citizens of the <u>COUNTRY TO</u> <u>SAVE THE EARTH.</u>

#### 8. Report on WORLD OZONE DAY 2020 Celebration

Date: 16<sup>th</sup> September'2020 Venue: (ONLINE)

#### "As umbrella protects us from rain, ozone protects the earth from the sun"

**On 16<sup>th</sup> September 2020,** Gitarattan Institute of Advanced Studies and Training organised a co-curricular activity of **POSTER MAKING** to spread awareness about World Ozone Day. The activity was conducted via Online Platform for second year trainees of Bachelors in Education (B.Ed). A list of sub themes (namely prohibiting the use of Nitrous Oxide, discourage driving of private vehicles, utilising eco-friendly cleaning products, No HCFCs) was provided as a medium, to stimulate ideas in the required direction. Posters help in giving an immediate virtual impression to the spectators and help in conveying the idea in limited words. This venture brought out the creative thinking expressions of the students and sensitized them towards this issue. The ozone layer is a natural layer of gas in the upper atmosphere that protects humans and other living things from harmful ultraviolet (UV) radiation and is therefore crucial to life on Earth. Moreover, the activity was a break free from the regular online classes for a lot of creative minds. The institute honoured the winners with an E-Certificate of Appreciation for their sincere efforts and to keep them encouraged for the future pursuit.



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